

QY 1 AGAGGGGAGGAGGAAAAACAGAGACCAAGACTCAGGGCTTCCCTCTGAGGCATGCACCCCCAC 60

Dp 1 AGAGGGGAGGAGGAAAAACAGAGACCAAGACTCAGGGCTTCCCTCTGAGGCATGCACCCCCAC 60

QY 1021 CTACAGTGGGCGATACACCGCGCCAGCGAGGAAAGATGCTCTTTCATGTGGGCG 1080
 1467 CTACAGTGGGCGATACACCGCGCCAGCGAGGAGAGATGCTCTTTCATGTGGGCG 1526
 QY 1081 ACTTCTCTGCGCGGCTCATGGGTTTGGCCACCATCATGGGTACATGAGCTGTGATCT 1140
 1527 ACTTCTCTGCGCGGCTCATGGGTTTGGCCACCATCATGGGTACATGAGCTGTGATCT 1586
 QY 1141 ACAACATGAACACTGACAGATGCGGCTTTCTACCCAGATCATGCACTGGTGAAGAAGTACA 1200
 1587 ACAACATGAACACTGACAGATGCGGCTTTCTACCCAGATCATGCACTGGTGAAGAAGTACA 1646
 QY 1201 TGAAGCTGACGACGTAAACCGCAAGTGGAGCGGCGCATTTTGACTGGTATCAGACCC 1260
 1647 TGAAGCTGACGACGTAAACCGCAAGTGGAGCGGCGCATTTTGACTGGTATCAGACCC 1706
 QY 1261 TGACAGATCAACAGAAAGATGACCAACAGAGTACCTTCTTACAGCACTTGCCTGAGCGGC 1320
 1707 TGACAGATCAACAGAAAGATGACCAACAGAGTACCTTCTTACAGCACTTGCCTGAGCGGC 1766
 QY 1321 TGCGGGGAGAGTGGCTGTGTGTGTGTGCACTGTGCACTGTGAGCGGCTGCAATCTTTC 1380
 1767 TGCGGGGAGAGTGGCTGTGTGTGTGTGCACTGTGCACTGTGAGCGGCTGCAATCTTTC 1826
 QY 1381 AGAAGCTGTAGGCGCAGCTGT 1440
 1827 AGAAGCTGTAGGCGCAGCTGT 1886
 QY 1441 CACCAAGGTAATGTATGTATGCGGCAAGAGAGACATTTGGCCAGAGATGTATCATCTCCGAG 1500
 1887 CACCAAGGTAATGTATGTATGCGGCAAGAGAGACATTTGGCCAGAGATGTATCATCTCCGAG 1946
 QY 1501 AGGCTCAACTGCGCGT 1560
 1947 AGGCTCAACTGCGCGT 2006
 QY 1561 GGCTCTACTTTGGGGAGATGACATCATCAATCAATCAATCAATCAATCAATCAATCAATCAATCA 1620
 2007 GGCTCTACTTTGGGGAGATGACATCATCAATCAATCAATCAATCAATCAATCAATCAATCAATCA 2066
 QY 1621 GCAACGCCAATCAAGAGCTAGGTTATTCAGACCTTATTCAGACCTTATTCAGACCTTATTCAGAC 1680
 2067 GCAACGCCAATCAAGAGCTAGGTTATTCAGACCTTATTCAGACCTTATTCAGACCTTATTCAGAC 2126
 QY 1681 TGCGGGAGT 1740
 2127 TGCGGGAGT 2186
 QY 1741 AGATCTCTGTGAATTAAGCAAGTTGTGACGTGAGGCGACCTGAGATGCGCCTGCG 1800
 2187 AGATCTCTGTGAATTAAGCAAGTTGTGACGTGAGGCGACCTGAGATGCGCCTGCG 2246
 QY 1801 AGAGAGCCACAGAGTCCGCGCTAGAGGCGCTAGACAGCAGCTGATGATCTACAGACCA 1860
 2247 AGAGAGCCACAGAGTCCGCGCTAGAGGCGCTAGACAGCAGCTGATGATCTACAGACCA 2306
 QY 1861 AGTTTGTCTGCTCTCTGCTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGT 1920
 2307 AGTTTGTCTGCTCTCTGCTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGT 2366
 QY 1921 AACGGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGT 1980
 2367 AACGGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGT 2426
 QY 1981 ACGAGGGTGAAGCTGTGAGAGGGAATCTTCAAAAGATGAAGAGGAGGAGGAGGAGGAGGAGG 2040
 2427 ACGAGGGTGAAGCTGTGAGAGGGAATCTTCAAAAGATGAAGAGGAGGAGGAGGAGGAGGAGG 2486
 QY 2041 GACCCCGAGGTCCAGAGTGAACCCATCCCATCCAGAGATTTCCACCTTCTTGTGATTC 2100
 2487 GACCCCGAGGTCCAGAGTGAACCCATCCCATCCAGAGATTTCCACCTTCTTGTGATTC 2546
 QY 2101 CAGAG 2105

Db 2547 CAGAG 2551

RESULT 3
 US-10-174-333-29
 ; Sequence 29, Application US/10174333
 ; Publication No. US20040029220A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Vermet, Corine A.M.
 ; APPLICANT: Fernandes, Elma R.
 ; APPLICANT: Gerlach, Valerie
 ; APPLICANT: Malyankar, Uriel M.
 ; APPLICANT: Boldos, Ferenc L.
 ; APPLICANT: Zerhusen, Bryan D.
 ; APPLICANT: Spytek, Kimberly A.
 ; APPLICANT: Majumder, Kumud
 ; APPLICANT: Tchernev, Velizar T.
 ; APPLICANT: Padigaru, Muralidhara
 ; APPLICANT: Paturajan, Meera
 ; APPLICANT: Burgess, Catherine E.
 ; APPLICANT: Gangoli, Neha A.
 ; APPLICANT: Smithson, Glenda
 ; APPLICANT: Rastelli, Luca
 ; APPLICANT: MacDougall, John R.
 ; APPLICANT: Taupier, Raymond J.
 ; APPLICANT: Grose, William M.
 ; APPLICANT: Szekeres, Edward S.
 ; APPLICANT: Alsobrook, John P.
 ; APPLICANT: Anderson, David W.
 ; APPLICANT: Guo, Xiaojia (Sasha)
 ; APPLICANT: Li, Li
 ; APPLICANT: Zhong, Mei
 ; TITLE OR INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
 ; FILE REFERENCE: 15966-783 CIP1
 ; CURRENT FILING DATE: 2002-06-18
 ; PRIOR APPLICATION NUMBER: US/10/174,333
 ; PRIOR FILING DATE: 2000-03-31
 ; PRIOR APPLICATION NUMBER: 60/193,664
 ; PRIOR FILING DATE: 2000-04-05
 ; PRIOR APPLICATION NUMBER: 60/194,614
 ; PRIOR FILING DATE: 2000-04-05
 ; PRIOR APPLICATION NUMBER: 60/195,063
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,066
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,067
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,068
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,069
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,070
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,510
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/219,855
 ; PRIOR FILING DATE: 2000-07-21
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 186
 ; SOFTWARE: CuroseqList version 0.1
 ; SEQ ID NO: 29
 ; LENGTH: 2551
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (779) .. (2503)
 ; US-10-174-333-29

Query Match 91.1%; Score 2101.8; DB 13; Length 2551;
 Best Local Similarity 99.9%; Pred. No. 0;
 Matches 2103; Conservative 0; Mismatches 0; Gaps 0;

QY	1	AGAGGGGAGAGAGAAAACAGACAAAGCTAGGCTTCCCTCTAGAGCATCACCCAC	60
Db	447	AGAGGGGAGAGAGAAAACAGACAAAGCTAGGCTTCCCTCTAGAGCATCACCCAC	506
QY	61	CTTCTCCAGGGATCTCATTTAGAGGTTTACTGGGAGGTTAAGCCAGGCTGGGA	120
Db	507	CTTCTCCAGGGATCTCATTTAGAGGTTTACTGGGAGGTTAAGCCAGGCTGGGA	566
QY	121	GACAGGGGAGAGTGTAGAGCTAGACTGTCTCCACCCTTCAAGTAGGCTAGCTCTG	186
Db	567	GACAGGGGAGAGTGTAGAGCTAGACTGTCTCTCCACCCTTCAAGTAGGCTAGCTCTG	626
QY	181	GTGTGTCTAAGAGCCCAAGAACAAAGAGTCAAGACAGAGAGCCCAAGAGGCTCTT	240
Db	627	GTGTGTCTAAGAGCCCAAGAACAAAGAGTCAAGACAGAGAGCCCAAGAGGCTCTT	686
QY	241	CAGACAGTCAGGCACTAGTGTCCCAATTCAGAACTCCCTTCAGGCAAGAGGCTGGA	300
Db	687	CAGGCACTCAGGCACTAGTGTCCCAATTCAGAACTCCCTTCAGGCAAGAGGCTGGA	746
QY	301	CATCTCACCCAGCACAGACCACAGAACATGAGCTCAGGACCCAAAGTAAACAA	360
Db	747	CATCTCACCCAGCACAGACCACAGAACATGAGCTCAGGACCCAAAGTAAACAA	806
QY	361	CAGAGTCAAGTCCCCCAGCCCATCCAGGCTCAGAAAGTCTGCTGTCTTGAACCAT	420
Db	807	CAGAGTCAAGTCCCCCAGCCCATCCAGGCTCAGAAAGTCTGCTGTCTTGAACCAT	866
QY	421	CTGGGGATTCTACTGTGGCTAACAATGCTCTTCCAGTCATGTATTAACCTGA	480
Db	867	CTGGGGATTCTACTGTGGCTAACAATGCTCTTCCAGTCATGTATTAACCTGA	926
QY	481	TCACTCTGTGTGACAGAGCTGTCTCCGACTTGCAGACGGTATCTGGGTGGCTGGT	540
Db	927	TCACTCTGTGTGACAGAGCTGTCTCCGACTTGCAGACGGTATCTGGGTGGCTGGT	986
QY	541	TGGTGTGTGACTACAGAGTGAACCTGTATTAACCTAAGACATGGTGTGGCTTCCAA	600
Db	987	TGGTGTGTGACTACAGAGTGAACCTGTATTAACCTAAGACATGGTGTGGCTTCCAA	1046
QY	601	CAGGATTTCTTGGAAACAGGGCATCTCGGTGTGTGACAAAGGTAGATCTGAGTGGCTAG	660
Db	1047	CAGGATTTCTTGGAAACAGGGCATCTCGGTGTGTGACAAAGGTAGATCTGAGTGGCTAG	1106
QY	661	TTGCGACTGTGAATTTCTTGTGAAGCTGGCTTCCCTGACAGATGTGTGCTAG	720
Db	1107	TTGCGACTGTGAATTTCTTGTGAAGCTGGCTTCCCTGACAGATGTGTGCTAG	1166
QY	721	TGGGGTGGGCCCCGACACACCCACCTGAGGCTAACCCTTTCTCGCGGCGCCGCGC	780
Db	1167	TGGGGTGGGCCCCGACACACCCACCTGAGGCTAACCCTTTCTCGCGGCGCCGCGC	1226
QY	781	TCTTTCAGAGGCTTTCACCGCACAGAGACCCGACAGCTTACCCAAATGCTTTGGCATG	840
Db	1227	TCTTTCAGAGGCTTTCACCGCGCAGAGACCCGACAGCTTACCCAAATGCTTTGGCATG	1286
QY	841	CCAAGCTATGCTTTACATTTTGTGTCATCAATCGAACAGCTGCTATTACTTTGGCC	900
Db	1287	CCAAGCTATGCTTTACATTTTGTGTCATCAATCGAACAGCTGCTTAACTTTGGCC	1346
QY	901	TATCCCGGTACTGTGGGCTTTCGGGGGTGACGATGGGTATCCGAGACCCCGCAGGCTG	960
Db	1347	TATCCCGGTACTGTGGGCTTTCGGGGGTGACGATGGGTATCCGAGACCCCGCAGGCTG	1406
QY	961	GCTTTGAGCGCTGTGGGCGCAGTACCTCTATAGCTTTTAACTTTCCACGCTGATATCTGA	1020
Db	1407	GCTTTGAGCGCTGTGGGCGCAGTACCTCTATAGCTTTTAACTTTCCACGCTGATATCTGA	1466
QY	1021	CTAAGTGTGGGATACACCGCGCGACGACAGAGAGAAAGTACTCTTTCATGTGGGGCG	1080
Db	1467	CTAAGTGTGGGATACACCGCGCGACGACAGAGAGAAAGTACTCTTTCATGTGGGGCG	1526
QY	1081	ACTTCTGCTGGGCGGTATGGGTTTGGCCACATCATGGGTAGCATAGGCTCTGTGATCT	1140

Db	1527	ACTCTCGTGGCCGTCATGGGTTTGGCCACCATCATGGGTAGATAGCTCTGCATCT	1586
QY	1141	ACAACTGAAACATGCAAGATGCGGCTTTCTAACCCAGATCATGCACTGGTGAAGAAGTACA	1200
Db	1587	ACAACTGAAACCTGGAGATGCGGCTTTCTAACCCAGATCATGCACTGGTGAAGAAGTACA	1646
QY	1201	TGAAGCTGAGACACGTCAACCCGACCTGGAGGGGGAGTATTGATGGTATCAGACC	1260
Db	1647	TGAAGCTGAGACACGTCAACCCGACCTGGAGGGGGAGTATTGATGGTATCAGACC	1706
QY	1261	TGCAGTACAACAAGAAAGATGACCAAGAGTACCATTCTTACAGACCTTGCTGAGCGC	1320
Db	1707	TGCAGTACAACAAGAAAGATGACCAAGAGTACCATTCTTACAGACCTTGCTGAGCGC	1766
QY	1321	TGCGGGCAAGATGGCTGTGTGTGCACTGTGCCACTCTGAGCCGGGTGCAATCTTTC	1380
Db	1767	TGCGGGCAAGATGGCTGTGTGTGCACTGTGCCACTCTGAGCCGGGTGCAATCTTTC	1826
QY	1381	AGAACTGTGAGGCCACGCTGTGAGAGAGCTGGTGTGAAGCTGCAGCCCCAGACCTACT	1440
Db	1827	AGAACTGTGAGGCCACGCTGTGAGAGAGCTGGTGTGAAGCTGCAGCCCCAGACCTACT	1886
QY	1441	CACCAAGGATTAATGATATGCCCAAAAGAGACATTTGGCCAAAGATGTACATCATCCGAG	1500
Db	1887	CACCAAGGATTAATGATATGCCCAAAAGAGACATTTGGCCAAAGATGTACATCATCCGAG	1946
QY	1501	AGGGTCAACTGCGCGTGTGGCAGATGATGTGATACACAGATGGTGCTGCTGGTGCAG	1560
Db	1947	AGGGTCAACTGCGCGTGTGGCAGATGATGTGATACACAGATGGTGCTGCTGGTGCAG	2006
QY	1561	GGCTCTACTTTGGGGAGATCAAGCATCATCAACAAAGGAAACATGTCTGGGAACCGCC	1620
Db	2007	GGCTCTACTTTGGGGAGATCAAGCATCATCAACAAAGGAAACATGTCTGGGAACCGCC	2066
QY	1621	GCAAGCAACATCAAGAGCTAGGTTATTGACACTATTCTGCTGACCAAGAGGAGCC	1680
Db	2067	GCAAGCAACATCAAGAGCTAGGTTATTGACACTATTCTGCTGACCAAGAGGAGCC	2126
QY	1681	TGCGGGAGGTGCTGAGCGAGTATCCACAGCAGACCATCATGAGAGGAAAGAGCGTG	1740
Db	2127	TGCGGGAGGTGCTGAGCGAGTATCCACAGCAGACCATCATGAGAGGAAAGAGCGTG	2186
QY	1741	AGATCCGCTGAAAAATGATCAAGTTTGACCGTGAATGCTGAGCCAGCTGAGATCGCTTGC	1800
Db	2187	AGATCCGCTGAAAAATGATCAAGTTTGACCGTGAATGCTGAGCCAGCTGAGATCGCTTGC	2246
QY	1801	AGGAGGCCACAGAGTCCCGGCTACGAGGCTTAGACACAGCAGCTGGATGTCAACAGACA	1860
Db	2247	AGGAGGCCACAGAGTCCCGGCTACGAGGCTTAGACACAGCAGCTGGATGTCAACAGACA	2306
QY	1861	AGTTTCTCGCCCTCCGCTGAGCTGAGTTCGACGCGCATTTAAGATTGCTTACCGCATTG	1920
Db	2307	AGTTTCTCGCCCTCCGCTGAGCTGAGTTCGACGCGCATTTAAGATTGCTTACCGCATTG	2366
QY	1921	AACGAGTGAAGTGGCAGACTCGAGAGTGGCCAAATGCCGAGAGCATGCTGGCTGAGGTG	1980
Db	2367	AACGAGTGAAGTGGCAGACTCGAGAGTGGCCAAATGCCGAGAGCATGCTGGCTGAGGTG	2426
QY	1981	ACGAGGGGTAGCTTGAGAGGGGAATTTCCAAAGATGAAGAGGGCAGGGCCAGCAGAGAG	2040
Db	2427	ACGAGGGGTAGCTTGAGAGGGGAATTTCCAAAGATGAAGAGGGCAGGGCCAGCAGAGAG	2486
QY	2041	GAACCCCAAGTCCAGAGTGAACCCCATCCCATCCCAAGATTTCCCACTCTTAACTGATTC	2100
Db	2487	GAACCCCAAGTCCAGAGTGAACCCCATCCCATCCCAAGATTTCCCACTCTTAACTGATTC	2546
QY	2101	CAGAG 2105	
Db	2547	CAGAG 2551	

RESULT 4

Query Match	Best Local Similarity	82.28%	Score 1897.4	DB 13	Length 2366
Matches 1898	Conservative	99.98%	Prod. No. 0	Mismatches 0	Indels 1
					Gaps 0
QY	162	AGTACGCTGAGCTCTGGTTGTGTGTCTAAGAGCGCCCAAGAAAGAAAGATCAACGCGAA	22		
Db	468	AGTACGCTGAGCTCTGGTTGTGTGTCTAAGAGCGCCCAAGAAAGAAAGATCAACGCGAA	527		
QY	222	GCCCAAGAGAGCTCTCTTCAACAGTCAAGGCACTAGTCCCACTCCAGAAAGTCCCTA	281		
Db	528	GCCCAAGAGAGCTCTCTTCAACAGTCAAGGCACTAGTCCCACTCCAGAAAGTCCCTA	587		
QY	282	CAGGACAGAGAGGCTGTGACATCTCAACCCAGAGACGACACACAGAAACATAGACCG	341		
Db	588	CAGGACAGAGAGGCTGTGACATCTCAACCCAGAGACGACACAGAAACATAGACCG	647		
QY	342	GACACCAAAGTGAAGCAACAAGATCAATCCCCAGGCCCATCCAAAGGCAGAGATTG	401		
Db	648	GACACCAAAGTGAAGCAACAAGATCAATCCCCAGGCCCATCCAAAGGCAGAGATTG	707		
QY	402	CTGCTGTCTGTGACCACTCTGAGGATTAATTAATCTGTGTGCTGAACAAATGCTTTC	461		

Db	708	CTGCCTCTCTGGAACCCATCTGGGGATTA	CTACTACTGTGGCTGMAACAATGCTTCC	767
QY	462	CCAGTCATGATTAACCTCATCATCTCTGTG	CGAGAGCTGTCTTCCCGACTTTGACAC	521
Db	768	CCAGTCATGATTAACCTCATCATCTCTGTG	CGAGAGCTCTCTTCCCGACTTTGACAC	827
QY	522	GGTATCTGGTGGCTGTGGTTGGTGTGGAC	TACACAGTGAACCTGTACTACTACTAGAC	581
Db	828	GGTATCTGGTGGCTGTGGTTGGTGTGGAC	TACACAGTGAACCTGTACTACTACTAGAC	887
QY	582	ATGCTGTGGCTTCCACAAGAAATCTTGGAA	CAGGGACCTGTGTGTGGACAAGGGT	641
Db	888	ATGCTGTGGCTTCCACAAGAAATCTTGGAA	CAGGGACCTGTGTGTGGACAAGGGT	947
QY	642	AGGATCTGAGTCGCTACGTTCCACCTGTGA	AGTTCTTCTTGGACCTGTGCTTCCCTGATG	701
Db	948	AGGATCTGAGTCGCTACGTTCCACCTGTGA	AGTTCTTCTTGGACCTGTGCTTCCCTGATG	1007
QY	702	CCCAACGATGTGCTTACGTGGGGCTGGGG	CCCGCACACACCACTCTGAGCTGAACGC	761
Db	1008	CCCAACGATGTGCTTACGTGGGGCTGGGG	CCCGCACACACCACTCTGAGCTGAACGC	1067
QY	762	TTTCTCCGGCGCCCCCGCTCTTTCAGAGC	CTTTCGACACAGACCCCGACACTTAC	821
Db	1068	TTTCTCCGGCGCCCCCGCTCTTTCAGAGC	CTTTCGACACAGACCCCGACACTTAC	1127
QY	822	CCAAATGCTTTCCGATTGCCAAAGCTGATG	CTTTCATTTTGTGCTCATCCATTTGGAAC	881
Db	1128	CCAAATGCTTTCCGATTGCCAAAGCTGATG	CTTTCATTTTGTGCTCATCCATTTGGAAC	1187
QY	882	AGCTGCCATATCTTTGGCCCTATCCCGGTA	CTTGGGCTTTCGGGGGTGAACGATGGGTGAC	941
Db	1188	AGCTGCCATATCTTTGGCCCTATCCCGGTA	CTTGGGCTTTCGGGGGTGAACGATGGGTGAC	1247
QY	942	CCGACCCCGCGCAGCCCTGCTTTTGAAGC	CTCCGCGCCCGCCAGTACTCTATAGCTTTTAC	1001
Db	1248	CCGACCCCGCGCAGCCCTGCTTTTGAAGC	CTCCGCGCCCGCCAGTACTCTATAGCTTTTAC	1307
QY	1002	TTTCTCACGCTGATACTGACTTACAGTGGG	CAGTACACCGCCGCGCAGGGGAAAGAG	1061
Db	1308	TTTCTCACGCTGATACTGACTTACAGTGGG	CAGTACACCGCCGCGCAGGGGAAAGAG	1367
QY	1062	TACCTCTTCAATGGTGGGCGAATTTCTGTG	CCGCTGATGGGTTTGGCCACATAGGGT	1121
Db	1368	TACCTCTTCAATGGTGGGCGAATTTCTGTG	CCGCTGATGGGTTTGGCCACATAGGGT	1427
QY	1122	AGCATGAGCTCTGTCACTCTACCAATGAACA	CTGAGATGGGGCTTTCTACCCAGATCAT	1181
Db	1428	AGCATGAGCTCTGTCACTCTACCAATGAACA	CTGAGATGGGGCTTTCTACCCAGATCAT	1487
QY	1182	GCACTGGTGAAGAGTACATGAAGCTGCAGC	ATCTCAACCGCAAGCTGAGCGGGAGATT	1241
Db	1488	GCACTGGTGAAGAGTACATGAAGCTGCAGC	ATCTCAACCGCAAGCTGAGCGGGAGATT	1547
QY	1242	ATTGACCTGGATACAGACCTTGCAGATCAA	CAGAAAGATGACCAAGAGTAAAGCATCTTAA	1301
Db	1548	ATTGACCTGGATACAGACCTTGCAGATCAA	CAGAAAGATGACCAAGAGTAAAGCATCTTAA	1607
QY	1302	CAGCACTTGCCTGAGCGGCTGGCGGGCAGAA	GTGGCTGTGTGTGTGACACTGTCCACTGTG	1361
Db	1608	CAGCACTTGCCTGAGCGGCTGGCGGGCAGAA	GTGGCTGTGTGTGTGACACTGTGTCCACTGTG	1667
QY	1362	AGCCGGGTGAGATCTTTTCAAGACTGTGAG	CCAGCTGTGCTGAGAGCTGTGTGTAAG	1421
Db	1668	AGCCGGGTGAGATCTTTTCAAGACTGTGAG	CCAGCTGTGCTGAGAGCTGTGTGTAAG	1727
QY	1422	CTGCAAGCCCCAGACCTACACAGGTGAAT	ATGTATGCCGCAAAAGAGACATTGGCCAA	1481
Db	1728	CTGCAAGCCCCAGACCTACACAGGTGAAT	ATGTATGCCGCAAAAGAGACATTGGCCAA	1787
QY	1482	GAGATGTATCATCATCCGAGAGGGTCAACT	GTGGCCGTGTGGCAATATGTATATCACACAG	1541
Db	1788	GAGATGTATCATCATCCGAGAGGGTCAACT	GTGGCCGTGTGGCAATATGTATATCACACAG	1847

[illegible]

Query Match	77.4%	Score 1785.4	DB 10	Length 1835
Best Local Similarity	99.5%	Pred. No. 0		
Matches 1825	Conservative	0	Mismatches	1
			Indels	9
			Gaps	3
Qy	280	TACAGGCAAGAGGGGTGTGACATCTCACACCCAGCAACGACCAACGAAACCATTTGAGCC	339	
Db	1	TACAGGCAAGAGGGGTGTGACATCTCACACCCAGCAACGACCAACGAAACCATTTGAGCC	60	
Qy	340	AGGACACCAAAGTGAAGAACACAGAGTCCAGTCCCCCGACCCCATTCAGGCC--AGGA	396	
Db	61	AGGACACCAAAGTGAAGAACACAGAGTCCAGTCCCCCGACCCCATTCAGGCCAGGAGA	120	
Qy	397	AGTTGCTGCTCTCTCTGAGACCCATCTGGGGATTAATACTACTGTGTGAACACATATGG	456	
Db	121	AGTTGCTGCTCTCTCTGAGACCCATCTGGGGATTAATACTACTGTGTGTGAACCAATGG	180	
Qy	457	TCTTCCAGTCAATGATAAAGTCAATCATCTCTGTGTGACAGAGCTGCTCCCCGACTTGG	516	
Db	181	TCTTCCAGTCAATGATAAAGTCAATCATCTCTGTGTGACAGAGCTGCTCCCCGACTTGG	240	
Qy	517	AGACAGGTATATCGGTGGCGCTGGTGGTCTGAGACTACAGAGTACCTGTACTATACAC	576	
Db	241	AGACAGGTATATCGGTGGCGCTGGTGGTCTGAGACTACAGAGTACCTGTACTATACAC	300	
Qy	577	TAGACATGSGTGTGCGCTTCCACACA--GGAATCTTGGAAACAGGCAATCTGGTGGTGG	633	
Db	301	TAGACATGSGTGTGCGCTTCCACACAGGTGGAATCTTGGAAACAGGCAATCTGGTGGTGG	360	
Qy	634	ACAAGGTAGATCTTGAGATCGCTAGCTTGACACTGGAGTTCTTCTTGGACTTGGCTT	693	
Db	361	ACAAGGTAGATCTTGAGATCGCTAGCTTGACACTGGAGTTCTTCTTGGACTTGGCTT	420	
Qy	694	CCCTGATGCCACAGATGATGTAGTGTGAGTGGCGTGGGCCCGACACACCCACCTTGAAGC	753	
Db	421	CCCTGATGCCACAGATGATGTAGTGTGAGTGGCGTGGGCCCGACACACCCACCTTGAAGC	480	
Qy	754	TGAACCGCTTTCTCGCGGCGCCCGCTCTTTCGAGGCTTTCGACCCGACAGAACCGCA	813	
Db	481	TGAACCGCTTTCTCGCGGCGCCCGCTCTTTCGAGGCTTTCGACCCGACAGAACCGCA	540	
Qy	814	CAGCTTACCAAATGCGCTTTTGATTCGATTCGACAGGTGATGCTTACATTTGTGCTCATCC	872	

Db 541 CAGCTTACCCAAATGCTTTCGATTCGCAAGCTGATGCTTATCTTTTGTGCTATCC 600
QY 874 ATGGAAGAGCTGCTCTATCTTTGCTTATCCCGTAACCTGGGCTTGGGCGTGAAGCAT 933
Db 601 ATGGAAGAGCTGCTCTATCTTTGCTTATCCCGTAACCTGGGCTTGGGCGTGAAGCAT 660
QY 934 GGGTGAACCCGAGCCCGGCGAGCTGCTTGAAGGCTTGGGCGGCGTGAAGCAT 993
Db 661 GGGTGAACCCGAGCCCGGCGAGCTGCTTGAAGGCTTGGGCGGCGTGAAGCAT 720
QY 994 GCTTTTACTTCTTCAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1053
Db 721 GCTTTTACTTCTTCAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 780
QY 1054 AAGAAAGATGATCTTTCATGATGATGATGATGATGATGATGATGATGATGATGAT 1113
Db 781 AAGAAAGATGATCTTTCATGATGATGATGATGATGATGATGATGATGATGATGATGAT 840
QY 1114 TCATGGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1173
Db 841 TCATGGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 900
QY 1174 CAGATCATGCACTGGTGAAGAGTATGATGATGATGATGATGATGATGATGATGATGATGAT 1233
Db 901 CAGATCATGCACTGGTGAAGAGTATGATGATGATGATGATGATGATGATGATGATGATGAT 960
QY 1234 GGGCAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1293
Db 961 GGGCAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1020
QY 1294 CCATCTTACAGCACTGGCTGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1353
Db 1021 CCATCTTACAGCACTGGCTGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1080
QY 1354 CCACTCTGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1413
Db 1081 CCACTCTGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1140
QY 1414 TGTGTAAGCTGCAAGCCCAAGCACTGACCAAGTGAATGATGATGATGATGATGATGATGAT 1473
Db 1141 TGTGTAAGCTGCAAGCCCAAGCACTGACCAAGTGAATGATGATGATGATGATGATGATGAT 1200
QY 1474 TTGGCCCAAGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1533
Db 1201 TTGGCCCAAGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1260
QY 1534 TCAACAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1593
Db 1261 TCAACAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1320
QY 1594 TCAAA---GGGAACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1650
Db 1321 TCAAAAGTGGGAACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1380
QY 1651 CAGACCTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1710
Db 1381 CAGACCTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1440
QY 1711 CACAGACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1770
Db 1441 CACAGACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1500
QY 1771 TGAATGCTGAGGAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1830
Db 1501 TGAATGCTGAGGAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1560
QY 1831 TAGACAGAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1890
Db 1561 TAGACAGAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1620
QY 1891 CCAGCGCACTTAAATGCTTAAATGCTTAAATGCTTAAATGCTTAAATGCTTAAATGCTTAAAT 1950
Db 1621 CCAGCGCACTTAAATGCTTAAATGCTTAAATGCTTAAATGCTTAAATGCTTAAATGCTTAAAT 1680

QY 1951 CAAATGCCGAGAGACCTGCTGAGGCTGATGACGAGGCTGAGCTTGAAGGAGAACTTCCA 2010
Db 1681 CAATGCCGAGAGACCTGCTGAGGCTGATGACGAGGCTGAGCTTGAAGGAGAACTTCCA 1740
QY 2011 AAGATGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2070
Db 1741 AAGATGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1800
QY 2071 ATCCCGAGATTCACACCTCTCTAGTGAATCCAGAG 2105
Db 1801 ATCCCGAGATTCACACCTCTCTAGTGAATCCAGAG 1835

RESULT 7
US-10-174-333-27
; Sequence 27, Application US/10174333
; Publication No. US20040029220A1
; GENERAL INFORMATION:
; APPLICANT: Vernet, Corine A.M.
; APPLICANT: Bernardes, Elma R.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Malyankar, Uriel M.
; APPLICANT: Boldog, Ferenc L.
; APPLICANT: Zerhusen, Bryan D.
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Majumder, Kumud
; APPLICANT: Tchiernev, Velizar T.
; APPLICANT: Padigarau, Muralidhara
; APPLICANT: Burgess, Catherine E.
; APPLICANT: Gangolli, Esha A.
; APPLICANT: Smithson, Glennda
; APPLICANT: Raetelli, Luca
; APPLICANT: MacDougall, John R.
; APPLICANT: Taupier, Raymond J.
; APPLICANT: Grose, William M.
; APPLICANT: Szekeres, Edward S.
; APPLICANT: Alsobrook, John P.
; APPLICANT: Anderson, David W.
; APPLICANT: Guo, Xiaojia (Sasha)
; APPLICANT: Li, Li
; APPLICANT: Zhong, Mei
; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
; FILE REFERENCE: 15966-783 CIP1
; CURRENT APPLICATION NUMBER: US/10/174,333
; PRIOR FILING DATE: 2002-06-18
; PRIOR APPLICATION NUMBER: 60/193,664
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 60/194,614
; PRIOR FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: 60/195,063
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,066
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,067
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,068
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,069
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,070
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,510
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/219,855
; PRIOR FILING DATE: 2000-07-21
; Remaining prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 186
; SOFTWARE: CuroSeqLast version 0.1
; SEQ ID NO 27
; LENGTH: 1835
; TYPE: DNA

ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (54) .. (1787)
US-10-174-333-27

Query Match 77.4%; Score 1785.4; DB 13; Length 1835;
Best Local Similarity 99.5%; Pired. No. 0;
Matches 1825; Conservative 0; Mismatches 1; Indels 9; Gaps 3;

280 TACAGGACGAGAGGAGTGTGACATCTCACACCCAGACAGACACAGAACATGAGCC 339
1 TACAGGACGAGAGGAGTGTGACATCTCACACCCAGACAGACACAGAACATGAGCC 60
340 AGGACACCAAG 396
61 AGGACACCAAG 120
397 AGTTGCTGCTGTCTGAGACCCATCTGGGAGATTACTACTGTGGCTGAACAAATGG 456
121 AGTTGCTGCTGTCTGAGACCCATCTGGGAGATTACTACTGTGGCTGAACAAATGG 180
457 TCTTCCAGACAGATATTAACCTCATCTCTGCTGAGAGAGAGAGAGAGAGAGAGAG 516
181 TCTTCCAGACAGATATTAACCTCATCTCTGCTGAGAGAGAGAGAGAGAGAGAGAG 240
517 AGCAGGTTATCTGTGAG 576
241 AGCAGGTTATCTGTGAG 300
577 TAGACATGTGTGTGAG 633
301 TAGACATGTGTGTGAG 360
634 ACAAGGAGAGAGATCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 693
361 ACAAGGAGAGAGATCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 420
694 CCTGATGCTCCAGAGATGTGTCTACGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 753
421 CCTGATGCTCCAGAGATGTGTCTACGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 480
754 TGAACCGCTTCTCCGCGCGCCGCTCTTGAAGAGAGAGAGAGAGAGAGAGAGAGAG 813
481 TGAACCGCTTCTCCGCGCGCCGCTCTTGAAGAGAGAGAGAGAGAGAGAGAGAGAG 540
814 CAGCTTACCCAAATGCTTGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 873
541 CAGCTTACCCAAATGCTTGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 600
874 ATTGAGACAGTCTCTATATCTTGGCCCTATCCCGGTACTCTGGGCTTCCGGGCTGAGCAT 933
601 ATTGAGACAGTCTCTATATCTTGGCCCTATCCCGGTACTCTGGGCTTCCGGGCTGAGCAT 660
934 GGGTGTACCCGAG 993
661 GGGTGTACCCGAG 720
994 GCTTTTACTTCTCCAGAGTGTGATGATGATGATGATGATGATGATGATGATGATGAT 1053
721 GCTTTTACTTCTCCAGAGTGTGATGATGATGATGATGATGATGATGATGATGATGAT 780
1054 AAGAGAGAGTCTCTCATGT 1113
781 AAGAGAGAGTCTCTCATGT 840
1114 TATGT 1173
841 TATGT 900
1174 CAGATATGACATGT 1233
901 CAGATATGACATGT 960

1234 GGGGAGTATTTAGT 1293
961 GGGGAGTATTTAGT 1020
1294 CCATCTTACAGCACTTGT 1353
1021 CCATCTTACAGCACTTGT 1080
1354 CCATCTTACAGCACTTGT 1413
1081 CCATCTTACAGCACTTGT 1140
1414 TGCTGAAGCTGACAGCCCAAGCTTCTCAACAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1473
1141 TGCTGAAGCTGACAGCCCAAGCTTCTCAACAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1200
1474 TTGGCCAGAGATGTATCATATCTCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1533
1201 TTGGCCAGAGATGTATCATATCTCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1260
1534 TCACACAGTATGT 1593
1261 TCACACAGTATGT 1320
1594 TCACACAGTATGT 1650
1321 TCACACAGTATGT 1380
1651 CAGACCTATTTCTGCTGT 1710
1381 CAGACCTATTTCTGCTGT 1440
1711 CACAGACATATCATGT 1770
1441 CACAGACATATCATGT 1500
1771 TGAATGT 1830
1501 TGAATGT 1560
1831 TAGACACAGCTGT 1890
1561 TAGACACAGCTGT 1620
1891 CAGAGGCACTTAAGATGT 1950
1621 CAGAGGCACTTAAGATGT 1680
1951 CAATGCCGAGAGAGCTGT 2010
1681 CAATGCCGAGAGAGCTGT 1740
2011 AAGATGAG 2070
1741 AAGATGAG 1800
2071 ATCCCGAGAGATCCCACTCTCTAGTGAATCCAGAG 2105
1801 ATCCCGAGAGATCCCACTCTCTAGTGAATCCAGAG 1835

RESULT 8
US-09-735-932-1
Sequence 1, Application US/09735932
Patent No. US20020037548A1
GENERAL INFORMATION:
APPLICANT: GUEGLER, Karl et al
TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUM AN TRANSPORTER PROTEINS,
TITLE OF INVENTION: AND USES THEREOF
FILE REFERENCE: CL000663
CURRENT APPLICATION NUMBER: US/09/735, 932

CURRENT FILING DATE: 2000-12-14
 NUMBER OF SEQ ID NOS: 4
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 1
 LENGTH: 1755
 TYPE: DNA
 ORGANISM: Human
 US-09-735-932-1

Query Match 75.5%; Score 1742.6; DB 9; Length 1755;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 1745; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 325 ACAGAACCATGAGCAGGAGACCAAGTGAAGACACAGAGTCCAGTCCCCAGGCCCAT 384
 Db 3 ACAGAACCATGAGCAGGAGACCAAGTGAAGACACAGAGTCCAGTCCCCAGGCCCAT 62
 QY 385 CCAAGGCCAGGAAGTTGCTGCTGCTGCTGAGACCCCTCGGGGATTACTACTAGTGTGC 444
 Db 63 CCAAGGCCAGGAAGTTGCTGCTGCTGCTGAGACCCCTCGGGGATTACTACTAGTGTGC 122
 QY 445 TGAACACATGCTCTTCCAGTCAATGTAATACTCATATCTCTGTGACAGAGCTGCT 504
 Db 123 TGAACACATGCTCTTCCAGTCAATGTAATACTCATATCTCTGTGACAGAGCTGCT 182
 QY 505 TCCCCGACTTGACAGAGGTTATCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 564
 Db 183 TCCCCGACTTGACAGAGGTTATCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 242
 QY 565 TGTCTATCTATGACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 624
 Db 243 TGTCTATCTATGACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 302
 QY 625 TGTGTGTGAGCAAGGGTAGAGATCTGAGTGTGCTGCTGCTGCTGCTGCTGCTGCT 684
 Db 303 TGTGTGTGAGCAAGGGTAGAGATCTGAGTGTGCTGCTGCTGCTGCTGCTGCTGCT 362
 QY 685 ACCGAGGCTTCCGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 744
 Db 363 ACCGAGGCTTCCGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 422
 QY 745 CCTGTAGGCTGAACCCGCTTCTCCGCGCGCCCGGCTTCTGAGGCTTCTGACCGCA 804
 Db 423 CCTGTAGGCTGAACCCGCTTCTCCGCGCGCCCGGCTTCTGAGGCTTCTGACCGCA 482
 QY 805 AGACCCGACACGCTTACCAAAATGCTTTCGATTCGACAGCTGATGCTTACATTTTG 864
 Db 483 AGACCCGACACGCTTACCAAAATGCTTTCGATTCGACAGCTGATGCTTACATTTTG 542
 QY 865 TCGTATTCATGGAACAGCTGCTTATCTTTCGCTTATCCCGGTAAGCTGAGCTTGGGC 924
 Db 543 TCGTATTCATGGAACAGCTGCTTATCTTTCGCTTATCCCGGTAAGCTGAGCTTGGGC 602
 QY 925 GTGACGATGAGTGAACCCGAGACCCGCGAGCTGCTGCTGCTGCTGCTGCTGCTGCT 984
 Db 603 GTGACGATGAGTGAACCCGAGACCCGCGAGCTGCTGCTGCTGCTGCTGCTGCTGCT 662
 QY 985 ACCTTATAGCTTTTACTTCTCCAGCTGATACTGATCACTGAGGCGATACAGCCGCG 1044
 Db 663 ACCTTATAGCTTTTACTTCTCCAGCTGATACTGATCACTGAGGCGATACAGCCGCG 722
 QY 1045 CAGCCAGGGAAGAGTACCTTCTCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1104
 Db 723 CAGCCAGGGAAGAGTACCTTCTCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 782
 QY 1105 TCGCCACCATGAGTGAACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1164
 Db 783 TCGCCACCATGAGTGAACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 842
 QY 1165 CTTTCTACCCGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1224
 Db 843 CTTTCTACCCGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 902

QY 1225 AGCTGAGCGCGAGTTATGCTGCTATGACAGCTGCTGCTGCTGCTGCTGCTGCTGCT 1284
 Db 903 AGCTGAGCGCGAGTTATGCTGCTATGACAGCTGCTGCTGCTGCTGCTGCTGCTGCT 962
 QY 1285 ACAGAGTATGCTTCTTACAGCACTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1344
 Db 963 ACAGAGTATGCTTCTTACAGCACTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1022
 QY 1345 TGCACCTGCTCACTTGTGAGCGCGGTGAGATCTTTCAGAACTGTGAGGCACTGCTGCT 1404
 Db 1023 TGCACCTGCTCACTTGTGAGCGCGGTGAGATCTTTCAGAACTGTGAGGCACTGCTGCT 1082
 QY 1405 AGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1464
 Db 1083 AGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1142
 QY 1465 AAGGAGCATTTGGCCAGAGATGTAACATCACTCCAGAGAGGTCATCTGCGCTGCTGCT 1524
 Db 1143 AAGGAGCATTTGGCCAGAGATGTAACATCACTCCAGAGAGGTCATCTGCGCTGCTGCT 1202
 QY 1525 ATGATGCTATCAACAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1584
 Db 1203 ATGATGCTATCAACAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1262
 QY 1585 TCATCAACATCAAGAGGAAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1644
 Db 1263 TCATCAACATCAAGAGGAAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1322
 QY 1645 GTTATTCAGACTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1704
 Db 1323 GTTATTCAGACTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1382
 QY 1705 CACAAGCACAGCACTATGAGAGAGAAAGAGAGTGAATCTGCTGCTGCTGCTGCTGCTGCT 1764
 Db 1383 CACAAGCACAGCACTATGAGAGAGAAAGAGAGTGAATCTGCTGCTGCTGCTGCTGCTGCT 1442
 QY 1765 TGAAGCTGATGCTGAGAGGAGCTGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1824
 Db 1443 TGAAGCTGATGCTGAGAGGAGCTGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1502
 QY 1825 GAGGCTTACAGCAGAGCTGATGATCTGACAGCAAGTTGCTGCTGCTGCTGCTGCTGCTGCT 1884
 Db 1503 GAGGCTTACAGCAGAGCTGATGATCTGACAGCAAGTTGCTGCTGCTGCTGCTGCTGCTGCT 1562
 QY 1885 TGAAGCTGAGCAGCTTAAATGCTTACCGGATGAAAGGCTGAGTGAAGTGAAGTGAAG 1944
 Db 1563 TGAAGCTGAGCAGCTTAAATGCTTACCGGATGAAAGGCTGAGTGAAGTGAAGTGAAG 1622
 QY 1945 AGTGGCAATGCGCCAGAGCTGCTGAGAGCTGATGAGAGGCTGAGAGGCTGAGAGGAA 2004
 Db 1623 AGTGGCAATGCGCCAGAGCTGCTGAGAGCTGATGAGAGGCTGAGAGGCTGAGAGGAA 1682
 QY 2005 CTTCCAAAGATGAAGAGGCAAGGCAAGCAGAGAGGAAAGGCAAGGCTGAGAGTGAAG 2064
 Db 1683 CTTCCAAAGATGAAGAGGCAAGGCAAGCAGAGAGGAAAGGCAAGGCTGAGAGTGAAG 1742
 QY 2065 ATCCCAATC 2073
 Db 1743 ATCCCAATC 1751

RESULT 9
 US-10-207-951-1
 Sequence 1, Application US/10207951
 Publication No. US20030013156A1
 GENERAL INFORMATION:
 APPLICANT: Kari GUEGLER et al.
 TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS.
 TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS.
 FILE REFERENCE: CL000663CON
 CURRENT APPLICATION NUMBER: US/10/207,951
 CURRENT FILING DATE: 2002-07-31

PRIOR APPLICATION NUMBER: 09/735,932
 PRIOR FILING DATE: 2000-12-14
 PRIOR APPLICATION NUMBER: 60/211,223
 PRIOR FILING DATE: 2000-06-13
 NUMBER OF SEQ ID NOS: 25
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO: 1
 LENGTH: 1758
 TYPE: DNA
 ORGANISM: Homo sapiens
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (1)...(1758)
 OTHER INFORMATION: n = A,T,C or G
 US-10-207-951-1

Query Match 75.5%; Score 1742.6; DB 15; Length 1758;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 1745; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

325 ACAGAACCATGAGCCAGACACCAAGTGAAGCAACAGAGTCCAGTCCCGACCCCAT 384
 3 ACAGAACCATGAGCCAGACACCAAGTGAAGCAACAGAGTCCAGTCCCGACCCCAT 62
 385 CCAGGCGCAGAGGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 444
 63 CCAAGGCGCAGAGGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 122
 445 TGAACACATAGTCTTCCGAGTATGATGATGATGATGATGATGATGATGATGATGAT 504
 123 TGAACACATAGTCTTCCGAGTATGATGATGATGATGATGATGATGATGATGATGAT 182
 505 TCCCGAGCTTGCAGACAGTATGATGATGATGATGATGATGATGATGATGATGATGAT 564
 183 TCCCGAGCTTGCAGACAGTATGATGATGATGATGATGATGATGATGATGATGATGAT 242
 565 TGCTATACCTAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 624
 243 TGCTATACCTAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 302
 625 TGGTGTGAGCAAGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 684
 303 TGGTGTGAGCAAGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 362
 625 TGGTGTGAGCAAGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 684
 303 TGGTGTGAGCAAGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 362
 685 ACCTGAGCTTCCCTATGAGCCAGATGATGATGATGATGATGATGATGATGATGATGAT 744
 363 ACCTGAGCTTCCCTATGAGCCAGATGATGATGATGATGATGATGATGATGATGATGAT 422
 745 CCCTGAGGCTGAACCGCTTCTCCGCGCGCCGCTTCTTGAAGGCTTGAAGGCTTGAAG 804
 423 CCCTGAGGCTGAACCGCTTCTCCGCGCGCCGCTTCTTGAAGGCTTGAAGGCTTGAAG 482
 805 AGACCCCGACAGCTTACCCAAATGCTTCCGATGCGCAAGCTGATGATGATGATGATGAT 864
 483 AGACCCCGACAGCTTACCCAAATGCTTCCGATGCGCAAGCTGATGATGATGATGATGAT 542
 865 TCGTATCATGTAAGCAAGCTGCTATATCTTCCGATGCGCAAGCTGATGATGATGATGAT 924
 543 TCGTATCATGTAAGCAAGCTGCTATATCTTCCGATGCGCAAGCTGATGATGATGATGAT 602
 925 GTGACGATGAGTGTATCCCGAGCCCGCGAGCTGCTTGAAGGCTTGAAGGCTTGAAG 984
 603 GTGACGATGAGTGTATCCCGAGCCCGCGAGCTGCTTGAAGGCTTGAAGGCTTGAAG 662
 985 ACCTTATATGCTTTATCTTCCAGCTGATGATGATGATGATGATGATGATGATGATGATGAT 1044
 663 ACCTTATATGCTTTATCTTCCAGCTGATGATGATGATGATGATGATGATGATGATGATGAT 722
 1045 CAGCCAGGGAAGAGATGATCTTCTCATGATGATGATGATGATGATGATGATGATGATGAT 1104
 723 CAGCCAGGGAAGAGATGATCTTCTCATGATGATGATGATGATGATGATGATGATGATGAT 782
 1105 TCGCCACCATCATGAGTGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1164

DB 783 TCGCCACCATGATGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 842
 QY 1165 CTTTCTTACCCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1224
 DB 843 CTTTCTTACCCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 902
 QY 1225 AGCTGAGGCGGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1284
 DB 903 AGCTGAGGCGGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 962
 QY 1285 AGAGGTAGCCATCTTACAGCACTTGTGCTGAGCGCTGCGGCGAGAGTGTGTGTG 1344
 DB 963 AGAGGTAGCCATCTTACAGCACTTGTGCTGAGCGCTGCGGCGAGAGTGTGTGTG 1022
 QY 1345 TGCACCTGTCCACTGAGCCCGGAGTGAATCTTTCAGAACTGTGAGGCGAGCTGTG 1404
 DB 1023 TGCACCTGTCCACTGAGCCCGGAGTGAATCTTTCAGAACTGTGAGGCGAGCTGTG 1082
 QY 1405 AGAGCTGTGCTGAAGCTGAGCCCGAGACCTTACACAGTGAATGATGATGATGATGAT 1464
 DB 1083 AGAGCTGTGCTGAAGCTGAGCCCGAGACCTTACACAGTGAATGATGATGATGATGAT 1142
 QY 1465 AAGGAGACATTTGGCCAGAGATGATGATGATGATGATGATGATGATGATGATGATGAT 1524
 DB 1143 AAGGAGACATTTGGCCAGAGATGATGATGATGATGATGATGATGATGATGATGATGAT 1202
 QY 1525 ATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1584
 DB 1203 ATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1262
 QY 1585 TCATCAACATCAAGGGAACATGCTTGGGAACCGCGCAGCAGCCACATCAAGAGCTTAC 1644
 DB 1263 TCATCAACATCAAGGGAACATGCTTGGGAACCGCGCAGCAGCCACATCAAGAGCTTAC 1322
 QY 1645 GTTATTCAGACTATTCCTGCTGAGCAAGAGACCTGCGGAGAGTCTGAGCAGATATC 1704
 DB 1323 GTTATTCAGACTATTCCTGCTGAGCAAGAGACCTGCGGAGAGTCTGAGCAGATATC 1382
 QY 1705 CACAGAGCAGACCATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1764
 DB 1383 CACAGAGCAGACCATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1442
 QY 1765 TGAAGCTGAATGCTGAGCAGCTGAGATTCGCTGAGAGGCGCAAGAGTCTCCGCTTAC 1824
 DB 1443 TGAAGCTGAATGCTGAGCAGCTGAGATTCGCTGAGAGGCGCAAGAGTCTCCGCTTAC 1502
 QY 1825 GAGGCTTGAACAGCAGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1884
 DB 1503 GAGGCTTGAACAGCAGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1562
 QY 1885 TGGAGTCAGGCGCACTTAAATGCTTACCGATGGAACGCTGAGTGTGAGACTGAG 1944
 DB 1563 TGGAGTCAGGCGCACTTAAATGCTTACCGATGGAACGCTGAGTGTGAGACTGAG 1622
 QY 1945 AGTGCCCAATGCCAGAGACCTGCTGAGGCTGATGATGATGATGATGATGATGATGATGAT 2004
 DB 1623 AGTGCCCAATGCCAGAGACCTGCTGAGGCTGATGATGATGATGATGATGATGATGATGAT 1682
 QY 2005 CTTCCAAAGATGAAGAGGCGAGGCGCAACAGAGAGGAGCCCGAGTCCAGAGTACCC 2064
 DB 1683 CTTCCAAAGATGAAGAGGCGAGGCGCAACAGAGAGGAGCCCGAGTCCAGAGTACCC 1742
 QY 2065 ATCCCGATC 2073
 DB 1743 ATCCCGATC 1751

RESULT 10
 US-09-927-267-3
 ; Sequence 3; Application US/09927267
 ; Publication No. US20020182691A1
 ; GENERAL INFORMATION:

QY	1690	TGCTAGCGAGTATCCACAGCACAGACCATCATGAGAGGAAAGGACGTGAGATCTCTG	1749
Db	1	TGCTAGCGAGTATCCACAGCACAGACCATCATGAGAGGAAAGGACGTGAGATCTCTG	60
QY	1750	TGAAAATGAACAAGTTGGACGTGAATGCTGAGGACAGCTGAGATGCCCTCAGAGGCCA	1809
Db	61	TGAAAATGAACAAGTTGGACGTGAATGCTGAGGACAGCTGAGATGCCCTCAGAGGCCA	120
QY	1810	CAGAGCCCCGGCTACAGAGCCTAGACACAGACGTGATGATCTACAGACCAAGTTTGCT	1869
Db	121	CAGAGCCCCGGCTACAGAGCCTAGACACAGACGTGATGATCTACAGACCAAGTTTGCT	180
QY	1870	GCTCTCTGCTAGTGAAGTGCAGGCGACTTAAATTTGCTTACCGACTTTGAAGGCTGG	1929
Db	181	GCTCTCTGCTAGTGAAGTGCAGGCGACTTAAATTTGCTTACCGACTTTGAAGGCTGG	240
QY	1930	AGTGGCAGACTGAGAGTGGCCAAATGCCGAGAGACCTGGAGGCTGATACAGAGGGTG	1989
Db	241	AGTGGCAGACTGAGAGTGGCCAAATGCCGAGAGACCTGGAGGCTGATACAGAGGGTG	300
QY	1990	AGCTGAGGAGGGAATTCCTCAAAATGAGAGAGGGGACGGCCAGCAGAGAGGGACCCCCAG	2049
Db	301	AGCTGAGGAGGGAATTCCTCAAAATGAGAGAGGGGACGGCCAGCAGAGAGGGACCCCCAG	360
QY	2050	GTCGAGAGTACCCCATTCCTCCAGATTCCTCCTCTAATGAAATCCAGAGTGT	2109
Db	361	GTCGAGAGTACCCCATTCCTCCAGATTCCTCCTCTAATGAAATCCAGAGTGT	420
QY	2110	AGTAAAGCTTAACTGCTGCAACTCTGTCAATCCTGTGTGCGAATCAACAGACACAGAGCG	2169
Db	421	AGTAAAGCTTAACTGCTGCAACTCTGTCAATCCTGTGTGCGAATCAACAGACACAGAGCG	480
QY	2170	AATTGCTGTAGATGCGCAGACTAGAGATATAGAGTTTAAAGCACATTCAAGCCCCACT	2229
Db	481	AATTGCTGTAGATGCGCAGACTAGAGATATAGAGTTTAAAGCACATTCAAGCCCCACT	540

QY	393	AGGAAGTTGCTGCTGCTCTCTGAGCCCATCTGGGAGATTACTACTGCTGGCTGAACACA	452
Db	463	AAGAAGATGCGATCGTGTGAGCCGTCAGCAACTGTACTACCGCTGGCTGCACGCC	522
QY	453	ATGCTCTTCCAGTCATGTAATAACTTCATCTCTGTGTGACGACCGTCTTCCCGAC	512
Db	523	ATCCCTCGCTGCTCTTCTAATACTGGTATCTGCTATTATTCAGAGGCGCTGTTTCAGATGAG	582
QY	513	TTTGACGACAGGTATCTGTGTGCGCTGTGTGTGTCTGACATCACGAGTACCGCTGATAC	572
Db	583	CTGACGTCGAGTACCTGTAGTGTGTGTCTGTCTCTGACATCTCGGACAGATGTCCTGTAT	642
QY	573	CTACTAGACATGTGTGTGCGCTTCCACACAGAGATCTTGGAACAGGSCATCCGTGTGTG	632
Db	643	GTTCTGGATGTGCTTGTATCGAGCTCGACAGGTTTTCTCGACGAAGGCTTAATATGTCACT	702

QY 633 GACAAAGGATGATCTGAGTGCATGTTGCACTGAGATTTCTTTGAGCTGCT 692
 Db 703 GATACCAAGAGCTGTGAGCATTTACAAAGACACGACGATTCAGCTGATGTGTG 762
 QY 693 TCCCTGATGCCACAGATGTGTCTACGTGCGGCTGGGCGCGACACACCCAGCTGAG 752
 Db 763 TCCCTGTGCTCCACGACCTGGCTTACTTAAAGGTGGGCAAACTACCCAGAAAGTGAAG 822
 QY 753 CTGAACCGCTTCTCCGCGCGCGCGCTTTGAGGCTTGCAGCGGACAGAGACCGCC 812
 Db 823 TTCAACCGGCTTACAAAGTTTCCCGGCTTTGATTCCTTTGACCGGACAGAGCAAG 882
 QY 813 ACAGCTTACCCAAATGCTTTGGCATGCGAAAGCTGATGCTTTAATTTTGTGCTATC 872
 Db 883 ACCAATACCCAAATATGTTCAAGATGTGGAACTTGTGCTTGTATCATCTCATCATC 942
 QY 873 CATTGGAACAGTGCCTTACTTTGCTTATCCCGGTTACCTGGGCTTGGGCGGTGACCA 932
 Db 943 CACTGGAATGCTGATCTACTTTGCCATTTCCAAATTTGTTGGGACAGACTCC 1002
 QY 933 TGGGTGATCCCGGACCCCGGCGAGCTTGTGAGCGCTTGCAGCGGACGATACCTCTAT 992
 Db 1003 TGGGTCTAACCCAAATCTCATCTCCAGAGCATGGGCGCTTCCAGGAATCATTTAC 1062
 QY 993 AGCTTTACTTCTCCAGGCTGATATCTGATCACTAGTGGCGATACACGCGCGGACGAG 1052
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Search completed: September 11, 2004, 01:12:22
 Job time : 1081.8 secs

GenCore version 5.1.6
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OM protein - nucleic search, using frame_plus_p2n model

Run on: September 11, 2004, 01:41:30 ; Search time 749 Seconds

(without alignments)
3862.651 Million cell updates/sec

Title: US-09-927-267-1
Perfect score: 2989
Sequence: 1 MSQDTRKVTSTSSPPAPSKA.....EGTSDKDEGRASQEGPPPE 575

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Ygapop 10.0 , Ygapext 0.5
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Searched: 3304383 seqs, 2515761380 residues

Total number of hits satisfying chosen parameters: 6608766

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result Query *
No. Score Match Length DB ID Description

SUMMARIES

1	2989	100.0	1728	6	US-09-927-267-3	Sequence 3, Appli
2	2989	100.0	1728	9	US-10-189-507-2	Sequence 2, Appli
3	2989	100.0	2308	9	US-09-927-267-2	Sequence 2, Appli
4	2989	100.0	2366	13	US-10-302-172-351	Sequence 351, App
5	2984	99.8	2013	17	US-10-311-624-2	Sequence 2, Appli
6	2984	99.8	2551	10	US-09-842-758-29	Sequence 29, Appli
7	2984	99.8	2551	13	US-10-174-333-29	Sequence 29, Appli
8	2976	99.6	1755	9	US-09-735-932-1	Sequence 1, Appli
9	2976	99.6	1758	15	US-10-207-951-1	Sequence 1, Appli
10	2957.5	98.9	1835	10	US-09-842-758-27	Sequence 27, Appli
11	2957.5	98.9	1835	13	US-10-174-333-27	Sequence 27, Appli
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17	1554	52.0	1995	15	US-10-087-217-5	Sequence 5, Appli
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42	467.5	15.6	5065	15	US-10-067-457-4	Sequence 4, Appli
43	467.5	15.6	5499	13	US-10-276-774-973	Sequence 973, App
44	465.5	15.6	3372	15	US-10-067-457-2	Sequence 2, Appli
45	465.5	15.6	3459	13	US-10-311-795-3	Sequence 3, Appli

ALIGNMENTS

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US-09-927-267-3
Sequence 3, Application US/09927267
Publication No. US20020182691A1
GENERAL INFORMATION:
APPLICANT: Cretech, Christopher D.
APPLICANT: Jeggla, Timothy J.
TITLE OF INVENTION: ICgen, Inc.
TITLE OF INVENTION: Channel
FILE REFERENCE: 018512-006510US
CURRENT APPLICATION NUMBER: US/09/927, 267
CURRENT FILING DATE: 2001-08-10
PRIORITY APPLICATION NUMBER: US 60/226, 253
PRIORITY FILING DATE: 2000-08-17
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3
LENGTH: 1728
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: cyclic nucleotide-gated cation channel 2B (CNG2B)

OTHER INFORMATION: coding sequence
 NAME/KEY: CDS
 LOCATION: (1) ..(1728)
 OTHER INFORMATION: CNG2B
 US-09-927-267-3

Alignment Scores:
 Pred. No.: 0 Length: 1728
 Score: 2989.00 Matches: 575
 Percent Similarity: 100.00% Conservative: 0
 Best Local Similarity: 100.00% Mismatches: 0
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RESULT 2
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 Sequence 2, Application US/10189507
 Publication No. US2003022863A1
 GENERAL INFORMATION:
 APPLICANT: ZOLLER, MARK
 APPLICANT: XU, HONG
 APPLICANT: STASZEWSKI, LENA
 APPLICANT: MOYER, BRIAN
 APPLICANT: PRONIN, ALEXEY
 APPLICANT: ADLER, JON ELLIOT
 APPLICANT: SERVANT, GUY
 APPLICANT: CALLAMARAS, NICHOLAS
 TITLE OF INVENTION: EXPRESSION OF FUNCTIONAL HUMAN OLFACTORY CYCLIC

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; TITLE OF INVENTION: NUCLEOTIDE GATED (NG) CHANNEL IN RECOMBINANT HOST
; TITLE OF INVENTION: CELLS AND USE THEREOF IN CELL BASED ASSAYS TO IDENTIFY
; FILE REFERENCE: SMELL MODULATORS
; CURRENT APPLICATION NUMBER: US/10/189,507
; PRIOR FILING DATE: 2003-02-12
; PRIOR APPLICATION NUMBER: 60/303,140
; PRIOR FILING DATE: 2001-07-06
; PRIOR APPLICATION NUMBER: 60/337,154
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO: 2
; LENGTH: 1728
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-189-507-2

Alignment Scores:
Pred. No.: 0 Length: 1728
Score: 2989.00 Matches: 575
Percent Similarity: 100.00% Conservative: 0
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QY 201 TyrValTyrProAspProAlaGlnProGlyPheGluArgLeuArgAlaGlnTyrLeuTyr 220
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QY 481 AsnAlaGluAlaIleGluIleAlaLeuGlnGluAlaThrGluSerArgLeuArgGlyLeu 500
DB 1441 AATGCTGAGGAGCTGAGATGCCCTGACAGAGGCCACAGAGTCCCGGCTACAGAGGCTTA 1500
QY 501 AspGlnGlnLeuAspAspLeuGlnThrLysPheAlaArgLeuLeuAlaGluLeuGluSer 520
DB 1501 GACCAAGAGCTGAGATGATCTACAGACCAAGTTTCTGCTGCTGCTGCTGCTGCTGCTGCT 1560
QY 521 SerAlaLeuLysIleAlaTyrArgIleGluArgLeuGluTyrPginThrArgGluThrPro 540
DB 1561 AGGCACTTAAGATTTGCTTACCGCATTTGAACGCTGAGAGTGGACATCTCGAGAGTGGCA 1620
QY 541 MetProGluAspLeuAlaGluAlaAspAspGluGlyGluProGluGluGlyThrSerLys 560
DB 1621 ATGCCCGAGGACCTGCTGAGGCTGATGACGAGGGGTAGCTGAGAGGAGAACTTCCAAA 1680
QY 561 AspGluGluGlyArgAlaSerGlnGluGlyProProGlyProGlu 575
DB 1681 GATGAAAGAGGCGAGGCGACGAGAGAGACCCCAAGGTCCAGAG 1725

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RESULT 3
US-09-927-267-2

QY 541 MetProGluAspLeuAlaGluAlaAspAspGluGlyGluProGluGluGlyThrSerLys 560
 Db 1953 ATCCCGAGGAGCCTGGCTGAGGCTGATGACGAGGAGGCTGAGGAGGAACTTCCAA 2012
 QY 561 AsgGluGluGlyArgAlaSerGlnGlyProProGlyProGlu 575
 Db 2013 GATGAAGAGGCGAGGCCACGAGAGGAGGCCCGGCTGAGAG 2057
 RESULT 4
 US-10-302-172-351
 ; Sequence 351, Application US/10302172
 ; Publication No. US200400053250A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Tang, Y. Tom
 ; APPLICANT: Xue, Aidong J.
 ; APPLICANT: Dimauc, Radoje T.
 ; TITLE OF INVENTION: No. US0040053250A1 Arginine-rich Protein-like Nucleic Acids an
 ; TITLE OF INVENTION: Polypeptides
 ; FILE REFERENCE: 803 1CNCF
 ; CURRENT APPLICATION NUMBER: US/10/302,172
 ; CURRENT FILING DATE: 2002-11-21
 ; PRIOR APPLICATION NUMBER: US 10/225,251
 ; PRIOR FILING DATE: 2002-08-20
 ; PRIOR APPLICATION NUMBER: PCT US02/05095
 ; PRIOR FILING DATE: 2002-03-05
 ; PRIOR APPLICATION NUMBER: US 09/799,451
 ; NUMBER OF SEQ ID NOS: 950
 ; SOFTWARE: pt FL_genes Version 2.0
 ; SEQ ID NO 351
 ; LENGTH: 2366
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (639)..(2363)
 ; US-10-302-172-351
 Alignment Scores:
 Pred. No.: 0 Length: 2366
 Score: 2989.00 Matches: 575
 Percent Similarity: 100.00% Conservative: 0
 Best Local Similarity: 100.00% Mismatches: 0
 Query Match: 100.00% Indels: 0
 DB: 13 Gaps: 0
 US-09-927-267-1 (1-575) x US-10-302-172-351 (1-2366)
 QY 1 MetSerGluAspThrLysValLysThrThrGluSerSerProProAlaProSerLysAla 20
 Db 639 ATGAGCCAGGACACCAAGAGACACAGAGTCCAGTCCCGCCAGCCCATCCAAAGCC 698
 QY 21 ArgLysLeuLeuProValLeuAspProSerGlyAspLysLysLysLysLysLysLysLys 40
 Db 699 AGGAAGTTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 758
 QY 41 MetValPheProValMetLysAsnLeuLysLeuValCysArgAlaCysPheProAsp 60
 Db 759 ATGCTCTCCAGCATGATATACCTATATCCCTCGTGCAGAGCTGCTTCCCGAC 818
 QY 61 LeuGlnHisGlyLysLeuValAlaTrpLeuValLeuAspLysLysLysLysLysLysLys 80
 Db 819 TTGAGAGAGGCTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 878
 QY 81 LeuLeuAspMetValValArgPheHisThrGlyPheLeuGlnGlyLysLeuValVal 100
 Db 879 CTAATGACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 938
 QY 101 AspLysGlyArgLysSerSerArgLysValArgThrTrpSerPhePheLeuAspLeuAla 120
 Db 939 GACAAAGGATAGATCTCGAGTCCGCTAGCTGACACCTGAGACTTCTTGGACCTGGCT 998
 QY 121 SerLeuMetProThrAspValValLysValArgLeuGlnGlyProHisThrProThrLeuArg 140

Db 999 TCCCTGATGCCACACATGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1058
 QY 141 LeuAsnArgPheLeuArgAlaProArgLeuPheGluAlaPheAspArgThrGlnThrArg 160
 Db 1059 CTGAACCGCTTCTCCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1118
 QY 161 ThrAlaLysProAsnAlaPheArgLysLeuLysLeuMetLeuLysLysLeuValLys 180
 Db 1119 AACGCTTACCAATGCTTGGCATTTGCAAGCTGATCTTACATTTTTCGTCATC 1178
 QY 181 HisTrpAsnSerCysLeuLysPheAlaLeuSerArgLysLeuGlyPheGlyArgAspAla 200
 Db 1179 CATTGGAAGAGCTGCTTACTTGGCTTATCCCGTATCCCGTATCCCGTATCCCGTATCCCG 1238
 QY 201 TrpValLysProAspProAlaGlnProGlyPheGluArgLeuArgLysLysLysLysLys 220
 Db 1239 TGGGTGTACCGGAGCCCGCGAGCTGCTTGAAGCGCTGCGCGCGAGTACCTCTAT 1298
 QY 221 SerPheLysPheSerThrLeuLysLeuLysLysLysLysLysLysLysLysLysLysLys 240
 Db 1299 AGCTTTTACTTCTCCAGCTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCT 1358
 QY 241 GluGluGluLysLysPheMetValGlyAspPheLeuValMetGlyPheAlaThr 260
 Db 1359 GAAGAAGAGTACCTTCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1418
 QY 261 LMetGlySerMetSerSerValLysLysMetAsnThrAlaAspAlaLysPheLys 280
 Db 1419 ATCATGGGTAGCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1478
 QY 281 ProAspHisAlaLeuValLysLysLysLysLysLysLysLysLysLysLysLysLysLys 300
 Db 1479 CCAAGTATGACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1538
 QY 301 ArgArgValLysAspTrpLysGlnHisLeuGlnLysLysLysLysLysLysLysLysLys 320
 Db 1539 CGCGAGTATTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1598
 QY 321 AlaLeuGlnHisLeuProGluArgLeuArgAlaGluValAlaValSerValHisLys 340
 Db 1599 GCCATCTTACAGCACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1658
 QY 341 SerThrLeuSerArgValGlnLysPheGlnLysCysGluAlaSerLeuLeuGlnLys 360
 Db 1659 TCCCTGAGACCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1718
 QY 361 ValLeuLysLeuGlnProGlnThrLysSerProGlyGlyLysValCysArgLysLysLys 380
 Db 1719 GTGCTGAAGCTGAGCCCGGAGACCTTACACCAAGGTGAATATGATGCTGCTGCTGCTGCT 1778
 QY 381 LLeuGlnGlnMetLysLysLysLysLysLysLysLysLysLysLysLysLysLysLysLys 400
 Db 1779 ATTGGCAAGAGATGATCATCATCCGAGAGGCTCACTGCTGCTGCTGCTGCTGCTGCTGCT 1838
 QY 401 LLeuThrGlnTrpAlaValLeuGlyValGlnLysLysLysLysLysLysLysLysLysLys 420
 Db 1839 ATCAACAAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1898
 QY 421 LLeuLysLysAsnMetSerGlyAsnArgArgThrAlaAsnLysLysSerLeuGlyLysSer 440
 Db 1999 ATCAAGAAGAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1958
 QY 441 AspLeuPheCysLeuSerLysGluAspLeuArgLysValLeuSerGlyLysProGlnAla 460
 Db 1959 GACCTATTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2018
 QY 461 GlnThrLysMetGlnGlyLysArgLysLysLysLysLysLysLysLysLysLysLysLys 480
 Db 2019 CAGACATCATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2078
 QY 481 AsnAlaGluAlaAlaGluLysLysLysLysLysLysLysLysLysLysLysLysLysLysLys 500

1439 AGCTTTACTCTCCAGCGTATGATCACTGAGGCGCATCAACCGCGCCAGGCCAGG 1498
 241 GUGUGUGUUTYRLEUPHEMETVALIGLYASPHELEULEUALAVALMETGLYPHEALATHR 260
 1499 GAAGAAAGAGTACTCTTCATGCTGGGAGCTCTCTGCTGGCCCTGATGAGGTTTCCGACCC 1558
 261 ILMETGLYSERSETSERVALIETRYASNMETASNTHRALAAPALAAIAPHEITYR 280
 1559 ATCATGGGTAGCATGAGCTCTGTCATCTACACATGAACTGACAGATGGCGCTTTTCTAC 1618
 281 PROAPHEIALALEUVALVLYSTYRMEITYLEUINHISVALAANATGLYLEUGLU 300
 1619 CCACATATGACATGCTGGTGAAGAGTACATGAGCTGACAGCTGACACCGCAGCTGGAG 1678
 301 ARGARGVALIIEAPTPIYRGINHISLEUGNINLEASNYLSYMETTHRASNGIUAL 320
 1679 CGGGGAGTTATGACTGGTATCAGACCTTGACATCAACAAAGAGATGACCAAGAGTA 1738
 321 ALAILEUGNINISLEUPROGLUARGLEUARGALAGIUALAVALSERVALHISLEU 340
 1739 GCCATCTTACAGCACTTGCTGAGCGGCTGCGGAGAGAGGCTGTGTCTGTCCACTG 1798
 341 SERPHRIUSERARGVALIGNILEPHEGINASNCYSGLIUALASERLEULEUGLU 360
 1799 TCCACTGTGAGCCGGGTGCAGATCTTTCAGAACTGTGAGGCCAGCTGCTGAGAGAGCTG 1858
 361 VALLEULYSLEUGNIPROGLINTHRTYRISERPROGLIYUITYRVALCYSEARGLYSELYASP 380
 1859 GTGCTGAAGCTGAGGCCCCACACCTACTCACAGGTGAAATGATGATGCGCAAGAGAAC 1918
 381 ILEGLYINGLUETRYTILELLARGGLUGLYGILNLEUALAVALAVALAASPASPGLY 400
 1919 ATTGGCCAAAGAGATGATCATCATCGAGAGGTCACCTGCGGTGTGTGTGTGTGTGTGTGT 1978
 401 ILETHNGIYUITYRVALAVALLEUGLYVALAGLYLEUITYRPHGLYGINILESERILELEASN 420
 1979 ATCAACAGATGATGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2038
 421 ILEYSGLYASNMETSERGLYASNAARGATGTHRALAASNIILEYSERILEUGLYTYRISER 440
 2039 ATCAAGAGGAGATGCTGTGAGAACCGCGGACCAAGCAATCAAGAGCTGATGCTGATGCTGATGCT 2098
 441 ASPLEUPHECYSEUSERISGLYASPLEUATGILUVALLEUSERGLIUTYRPROGLINLA 460
 2099 GACCTATTCTGCTGAGCAAGAGAGACCTGCGGAGGTGCTGAGCGAGTATCCACAAGCA 2158
 461 GINTHRIEMETGLUGILNLYSGIYARGGILULEULEULYSMETASNLSEULASPVAL 480
 2159 CAGACCATCATGAG 2218
 481 AENALAGIUALAALAGIULILEALALEUGINGIUALATHRGUSERARGLEUARGLYLEU 500
 2219 AATGCTGAGGCGAGCTGAGATCCCTGCGAGAGGCCACAGAGTCCGCTACAGAGGCCCTA 2278
 501 ASPGILINGIULEUASPSPLEUGINTHRTYRISPHENALATRYLEULEUALAGIULEUGIUSER 520
 2279 GACCGAGAGCTGATGATCTACAGACCAAGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2338
 521 SERIALALEUHLILEALATYRARGILEGLIARGLEUGIUTRPGIINTHRAARGIUTRPRO 540
 2339 AGCGCACTTAAAGTTCTTACCCCATTTGAACGGCTGAGATGGAGAGCTGAGAGAGTGGCCA 2398
 541 METPROGLIUALSPLEUALAGIUALAASPAPGILUGLYGILUPROGLIUGIUGLYTHRSELYS 560
 2399 ATGCCCGAGAGAGCTGCTGAGGCTGATGACAGAGGTGAGGCTGAGAGAGGAGAACTTCCAAA 2458
 561 ASPGILUGIUGLYARGALASERGLINGIUGLYPROPROGLIYUITYR 575
 2459 GATGAAGAGGAGCGGCGCAGCCAGGAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2503

RESULT 7
 US-10-174-333-29

; Sequence 29, Application US/10174333
 ; Publication No. US20040029220A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Vermet, Corine A.M.
 ; APPLICANT: Fernandes, Elma R.
 ; APPLICANT: Gerlach, Valerie
 ; APPLICANT: Malyankar, Uriel M.
 ; APPLICANT: Boldog, Ferenc L.
 ; APPLICANT: Zerkusen, Bryan D.
 ; APPLICANT: Spytek, Kimberly A.
 ; APPLICANT: Majumder, Kumud
 ; APPLICANT: Tchernev, Velizar T.
 ; APPLICANT: Padigaru, Muralidhara
 ; APPLICANT: Patnrajan, Meera
 ; APPLICANT: Burgess, Catherine E.
 ; APPLICANT: Gangoli, Beba A.
 ; APPLICANT: Smithson, Glenda
 ; APPLICANT: Rastelli, Luca
 ; APPLICANT: MacDougall, John R.
 ; APPLICANT: Taupier, Raymond J.
 ; APPLICANT: Grose, William M.
 ; APPLICANT: Szekeres, Edward S.
 ; APPLICANT: Alsobrook, John P.
 ; APPLICANT: Anderson, David W.
 ; APPLICANT: Guo, Xiaojia (Sasha)
 ; APPLICANT: Li, Li
 ; APPLICANT: Zhong, Mei
 ; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
 ; FILE REFERENCE: 15966-783 CIP1
 ; CURRENT APPLICATION NUMBER: US/10/174,333
 ; CURRENT FILING DATE: 2002-06-18
 ; PRIOR APPLICATION NUMBER: 60/193,664
 ; PRIOR FILING DATE: 2000-03-31
 ; PRIOR APPLICATION NUMBER: 60/194,614
 ; PRIOR FILING DATE: 2000-04-05
 ; PRIOR APPLICATION NUMBER: 60/195,063
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,066
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,067
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,068
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,069
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,070
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/195,510
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/219,855
 ; PRIOR FILING DATE: 2000-07-21
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 186
 ; SOFTWARE: Curoseq1st version 0.1
 ; SEQ ID NO 29
 ; LENGTH: 2551
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (779) .. (2503)
 ; US-10-174-333-29

Alignment Scores:
 Pred. No.: 0
 Score: 2984.00
 Percent Similarity: 99.83%
 Best Local Similarity: 99.83%
 Query Match: 13
 DB: 13
 Length: 2551
 Matches: 574
 Conservative: 0
 Mismatches: 1
 Indels: 0
 Gaps: 0

US-09-927-267-1 (1-575) x US-10-174-333-29 (1-2551)

QY 1 MetSerGlnAspThrIleValIysThrThrGluSerSerProAlaProSerIysAla 20
 Db 779 ATGAGCCAGAGACCCAAAGTGAAGACAAAGAGTCCAGTCCCGCCAGCCCATCCAAAGGCC 838
 QY 21 ArgIysLeuLeuProValIleuAspProSerGlyAspTyrTyrTyrTrpIleuAsnThr 40
 Db 839 AGGAATTCGCTGCTCTCTGAGCCATCTGGGGAATTACTACTAGTGGGGTGAACACA 898
 QY 41 MetValPheProValMetTyrAsnLeuIleIleValAlaCysArgAlaCysPheProAsp 60
 Db 899 ATGCTCTCCAGCATGATATAACCATCATCTCTGTGCAAGACCTGCTCCCGAGC 958
 QY 61 LeuGlnHisGlyTyrIleuValAlaTrpLeuValIleuAspTyrThrSerAspLeuIleu 80
 Db 959 TTGCAGCAGGTTATCTGTGTGCTGTGTGCTGTGCACTACAGAGTACCTGCTATAC 1018
 QY 81 LeuLeuAspMetValValArgPheHsTrpHsIleuGluGluGlyIleuValVal 100
 Db 1019 CTACTAGACATGATGCTGCTGCTTCCACACAGAGATCTTGGAACAGGGCATCTGTGTGTG 1078
 QY 101 AspIysGlyArgIleSerSerArgTyrValArgThrTrpSerPhePheLeuAspLeuAla 120
 Db 1079 GACAAGGATAGGATCTCCAGTGCCTACGTTGGCACTGAGATTTCTTCTTGACCTGGCT 1138
 QY 121 SerLeuMetProThrAspValValIleTyrValArgLeuGlyProHisThrProThrLeuArg 140
 Db 1139 TCCCTGATGCCCAAGATGTGTGTCTACGTCGCGCTGGGCGCCGACACACCCCTGAGG 1198
 QY 141 LeuAsnArgPheLeuArgAlaArgProArgIleuPheGluAlaPheAspArgThrGluThrArg 160
 Db 1139 CTGAACCCGCTTCTCCGCGCGCCGCTCTTCCAGGCTTCCGACCGGCGCAAGACCCGC 1258
 QY 161 ThrAlaTyrProAsnAlaPheArgIleAlaIysLeuMetLeuTyrIlePheValValIle 180
 Db 1259 ACAGCTTACCCAAATGCCCTTTCGCACTGCAAGCATGCTTACATTTTCTCTCATC 1318
 QY 181 HisTrpAsnSerCysLeuTyrPheAlaLeuSerArgTyrLeuGlyPheGlyArgAspAla 200
 Db 1319 CATTGGAACAGCTGCTTACTTGTGCTTATCCCGTACTGCGGCTTGGGGGTGACCA 1378
 QY 201 TrpValTyrProAspProAlaGlnProGlyPheGluArgLeuArgArgGluTyrIleuTyr 220
 Db 1379 TGGGTGATCCCGGAGCCCGCGAGCTTGTGAGCCCTGCGCGCGCAGTACCTCAT 1438
 QY 221 SerPheTyrPheSerThrLeuIleuThrThrValGlyAspThrProProAlaArg 240
 Db 1439 AGCTTTTACTCTCCAGCTGATCTGACTACAGTGGCGCATACCCGCCCGCAGCCAGG 1498
 QY 241 GluGluGluTyrLeuPheMetValGlyAspPheLeuLeuAlaValMetGlyPheAlaThr 260
 Db 1499 GAAAGAAAGTACCTCTTCATGATGGGCGACTTCTGCTGCGCGCTCATGGGTTTGGCCACC 1558
 QY 261 IleMetGlySerMetSerSerValIleTyrAsnMetAsnThrAlaAspAlaAlaPheTyr 280
 Db 1559 ATCATGGTATGATGAGCTCTGTGATCTTCAACATGAACACTGCAAGATGCGGCTTTTAC 1618
 QY 281 ProAspHisAlaLeuValIysTyrMetIysLeuGlnHisValAsnArgIysLeuGlu 300
 Db 1619 CCAGATCATGCACTGCTGGAAGAAGTACATGAGCTGCGACGCTCAACCGCAAGCTGGAG 1678
 QY 301 ArgArgValIleAspTyrTyrGlnHisLeuGlnIleAsnIysLysMetThrAsnGluVal 320
 Db 1679 CGGCGAGTATATGATGCTGATCAGACCTGAGATCAACAGATGATCAACAGAGTA 1738
 QY 321 AlaIleLeuGlnHisLeuProGluArgLeuArgAlaGluValAlaValSerValHisLeu 340
 Db 1739 GCCATCTTTACAGCACTTGCCTGAGCGGCTGCGGCGAAGAGTGTGTGTGTGACACTG 1798
 QY 341 SerThrLeuSerArgValGlnIlePheGlnAsnGlySerGluIleSerLeuLeuGluLeu 360
 Db 1799 TCCACTCTGAGCGCGGAGAGATCTTTCAAGAACTGTAGAGCAAGCTGCTGAGAGAGCTG 1858
 QY 361 ValLeuIysLeuGlnProGlnThrTyrSerProGlyLeuTyrValCysArgLysGlyAsp 380

Db 1859 GTGCTGAAGCTCAGACCCAGACCTACTACACAGGTGAATATGTATGCCGCAAGAGAC 1918
 QY 381 IleGlyGlnGluMetTyrIleIleArgGluGlyGlnLeuAlaValAlaAspAspGly 400
 Db 1919 ATTGGCCAAAGATGTATCATCTCCAGAGGGGTCAACTGGCCGTGTGTGACATGTAGT 1978
 QY 401 IleThrGlnTyrAlaValLeuGluValArgLeuTyrPheGlyGluIleSerIleIleAsn 420
 Db 1979 ATCACAAGTATGCTGT 2038
 QY 421 IleIysGlyAsnMetSerGlyAsnArgArgThrAlaAsnIleLysSerLeuGlyTyrSer 440
 Db 2039 ATCAAGGGGACATGTCTGGGAAACCGCCGCAACGCCATCAAGAGCTTAGATTATTA 2098
 QY 441 AspLeuPheCysLeuSerIysGluAspLeuArgGluValLeuSerGluTyrProGlnAla 460
 Db 2099 GACCTATTCTGCTTACAGCAAGAGGACCTGCGGAGGTGTGTGAGCGATATCCACAAGCA 2158
 QY 461 GlnThrIleMetGluGluIysGlyArgGluIleLeuLeuLysMetAsnIysLeuAspVal 480
 Db 2159 CAGACCATCATGAGAGAGAGAGAGAGATCTGTGTAATAATGAACAAATTGACGTG 2218
 QY 481 AsnAlaGluAlaValGluIleAlaLeuGlnGluAlaThrGluSerArgLeuArgIleu 500
 Db 2219 AATGCTAGGAGCTGAGATGCGCTTGCAGAGAGGCAAGAGTCCCGGCTAGAGGCTTA 2278
 QY 501 AspGlnGlnLeuAspAspLeuGlnThrIysPheAlaArgLeuLeuAlaGluLeuGlnSer 520
 Db 2279 GACCAAGAGCTGAGATCTACAGACCAAGTTTGTCTCCCTCTGCTGAGCTGAGATGCC 2338
 QY 521 SerAlaLeuLysIleAlaTyrArgIleGluArgLeuGluTyrGlnThrArgGluThrPro 540
 Db 2339 AGCGACTTAAGATTTCTTACCGCATTTGAAGGCTGGAGTGGCACTTCGAGAGTGGCCA 2398
 QY 541 MetProGluAspLeuAlaGluAlaAspAspGluGlyGluProGluGluGlyThrSerIys 560
 Db 2399 ATGCCCGAGGACCTGGCTGAGAGCTGATGACAGAGGTGAGCTGAGAGAGAACTTCCAAA 2458
 QY 561 AspGluGluGlyArgAlaSerGlnGluGlyProGluGlyProGlu 575
 Db 2459 GATGAAGAGGCGAGGCGCAGCGCAGAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2503

RESULT 8
 US-09-735-932-1
 ; Sequence 1, Application US/09735932
 ; Patent No. US20020037548A1
 ; GENERAL INFORMATION:
 ; APPLICANT: GUEGLER, Karl et al
 ; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
 ; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HDM AN TRANSPORTER PROTEINS,
 ; TITLE OF INVENTION: AND USBS THEREOF
 ; FILE REFERENCE: CL000663
 ; CURRENT APPLICATION NUMBER: US/09/735, 932
 ; CURRENT FILING DATE: 2000-12-14
 ; NUMBER OF SEQ ID NOS: 4
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 1
 ; LENGTH: 1755
 ; TYPE: DNA
 ; ORGANISM: Human
 US-09-735-932-1

Alignment Scores:
 Pred. No.: 0 Length: 1755
 Score: 2976.00 Matches: 572
 Percent Similarity: 99.83% Conservative: 2
 Best Local Similarity: 99.48% Mismatches: 1
 Query Match: 99.57% Indels: 0
 DB: Gaps: 0

US-09-927-267-1 (1-575) x US-09-735-932-1 (1-1755)

Score: 2976.00 Matches: 572
 Percent Similarity: 99.83% Conservative: 2
 Best Local Similarity: 99.48% Mismatches: 1
 Query Match: 99.57% Indels: 0
 Gaps: 0

US-09-927-267-1 (1-575) x US-10-207-951-1 (1-1758)

QY 1 MetSerGlnAspThrLysValLysThrThrgLysSerSerProProAlaProSerLysAla 20
 Db 11 ATGACCAAGACAGACCAAGAGACAGACAGACAGACAGACAGACAGACAGACAGACAGAC 70
 QY 21 ArgLysLeuLeuProValLeuAspProSerGlyAspIlyrTyrrTyrrTyrrLeuAsnThr 40
 Db 71 AGGAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 130
 QY 41 MetValPheProValMetTyrrAsnLeuLeileuValCysArgAlaCysPheProasp 60
 Db 131 ATGCTCTTCCAGCATGATGATTAACCTCATCATCTGCTGCTGCTGCTGCTGCTGCTGCTG 190
 QY 61 LeuGlnHisGlyTyrrLeuValAlaIrrPheValLeuAspIlyrThrsAspLeuLeuTyrr 80
 Db 191 TTGACAGACAGGTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 250
 QY 81 LeuLeuAspMetValValArgPheHisThrGlyPheLeuGlnGlyIleLeuValVal 100
 Db 251 CTACTAGACATGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 310
 QY 101 AspLysGlyArgIleSerSerArgTyrrValArgThrTyrrPhePhePheLeuAspLeuAla 120
 Db 311 GACAAAGGATGAGATTCGAGTCGACGTCGACGTCGACGTCGACGTCGACGTCGACGTCGCT 370
 QY 121 SerLeuMetProThrAspValValTyrrValArgLeuGlyProHisThrProThrLeuArg 140
 Db 371 TCCCTGAGTCCCAAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 430
 QY 141 LeuAsnArgPheLeuArgAlaProArgLeuPheGlnAlaPheAspArgThrGluThrArg 160
 Db 431 CTGAACGCTTTCCTCCGCGCCGCTTTCGAGGCTTTCGACCGGACAGAGACCGCCG 490
 QY 161 ThrAlaTyrrProAsnAlaPheArgIleAlaIlyrLeuMetLeuTyrrIlePheValValIle 180
 Db 491 ACAGCTTACCCAAATGCTTTCGATTCGATTCGATTCGATTCGATTCGATTCGATTCGATTC 550
 QY 181 HisTrpAsnSerCysLeuTyrrPheAlaLeuSerArgTyrrLeuGlyPheGlyArgAspAla 200
 Db 551 CATGGAAACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 610
 QY 201 TrpValTyrrProAspProAlaGlnProGlyPheGlnArgLeuArgGlnTyrrLeuTyrr 220
 Db 611 TGGGTGTACCCGCGACCCGCGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 670
 QY 221 SerPheTyrrPheSerThrLeuIleLeuThrThrValGlyAspThrProProProAlaArg 240
 Db 671 AGCTTTACTTCTTCAAGCTGATTAAGTACATGATGAGGCTGATGAGGCTGATGAGGCTGATG 730
 QY 241 GlnGlnGlnIlyrLeuPheMetValGlyAspPheLeuAlaValMetGlyPheAlaThr 260
 Db 731 GAAGAAAGATACCTCTTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 790
 QY 261 IleMetGlySerMetSerSerValIleTyrrAsnMetAsnThrAlaAspAlaAlaPheTyrr 280
 Db 791 ATCATGTGGTGTGATGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 850
 QY 281 ProAspHisAlaLeuValLysIlyrMetLysLeuGlnHisValAsnArgLysLeuGln 300
 Db 851 CCAGATATGACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 910
 QY 301 ArgArgValIleAspTrpTyrrGlnHisLeuGlnIleAsnLysLysMetThrAsnGlnVal 320
 Db 911 CGGGAGATTATGACTGTATCAGCACTGCAAGTCAACAAGAAAGATGTCCACAGAGATA 970
 QY 321 AlaIleLeuGlnHisLeuProGlnArgLeuArgAlaGlnValAlaValSerValHisLeu 340

Db 971 GCCATCTTACAGCACTTCCCTGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1030
 QY 341 SerThrLeuSerArgValGlnIlePheGlnAsnCysGlnAlaSerLeuLeuGlnLeu 360
 Db 1031 TCCACTCTGAGCCGGGTGCAGATCTTTCAGAACTGTGAGGCTGAGGCTGCTGCTGCTGCTGCTGCTG 1090
 QY 361 ValLeuLysLeuGlnProGlnThrTyrrSerProGlyIlyrTyrrValCysArgLysGlyAsp 380
 Db 1091 GTGCTGAAGCTGACCCCAAGCTGATCACTACAGGATGATGATGATGATGATGATGATGATGATGATG 1150
 QY 381 IleGlyGlnGlnMetTyrrIleIleArgLysGlnGlnLeuAlaValAlaAspAspGly 400
 Db 1151 APTGGCCAAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1210
 QY 401 IleThrGlnTyrrAlaValLeuGlyAlaGlyLeuTyrrPheGlyGlnIleSerIleLeuAsn 420
 Db 1211 ATCACACAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1270
 QY 421 IleLysGlyAsnMetSerGlyAsnArgArgThrAlaAsnIleLysSerLeuGlyTyrrSer 440
 Db 1271 ATCAAAGGAAACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1330
 QY 441 AspLeuPheCysLeuSerLysGlyAspLeuArgGlnValLeuSerGlyTyrrProGlnAla 460
 Db 1331 GACCTATTCTGCTGAGCAAG 1390
 QY 461 GlnThrIleMetGlnGlnLysGlyArgGlnIleLeuLeuLysMetAsnLysLeuAspVal 480
 Db 1391 CAGACCATCATGAGGAG 1450
 QY 481 AsnAlaGlnAlaAlaGlnIleAlaLeuGlnGlnAlaThrGlySerArgLeuArgGlyLeu 500
 Db 1451 AATCTGAGGAGAGCTGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1510
 QY 501 AspGlnGlnLeuAspAspLeuGlnThrLysPheAlaArgLeuLeuAlaGlnLeuGlySer 520
 Db 1511 GACCAAGAGCTGAGTATGATCTACAGACCAAGTTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1570
 QY 521 SerAlaLeuLysIleAlaTyrrArgIleGlnArgLeuGlnTyrrGlnThrArgGlnTyrrPro 540
 Db 1571 AGCCGACTTAAAGATGCTTACCGCATTAACGCTGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 1630
 QY 541 MetProGlnLysPheAlaGlnAlaAspAspGlnGlnIlyrProGlnGlnGlyThrSerLys 560
 Db 1631 ATGCCCAAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1690
 QY 561 AspGlnGlnGlyArgAlaSerGlnGlnGlyProProGlyProGln 575
 Db 1691 GATGAAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1735

RESULT 10

US-09-842-758-27
 Sequence 27, Application US/09842758
 Publication No. US20030083244A1
 GENERAL INFORMATION:
 APPLICANT: Vernet, Corine A. M.
 APPLICANT: Fernandes, Elma R.
 APPLICANT: Gerlach, Valerie
 APPLICANT: Shinkets, Richard A.
 APPLICANT: Malyankar, Uriel M.
 APPLICANT: Boldog, Ferenc L.
 APPLICANT: Zerkusen, Bryan D.
 APPLICANT: Spytek, Kimberly A.
 APPLICANT: Majumder, Kumud
 APPLICANT: Tchernev, Velizar T.
 APPLICANT: Padigar, Muralidhara
 APPLICANT: Patnajan, Meera
 APPLICANT: Burgess, Catherine E.
 APPLICANT: Gangoli, Bha A.
 APPLICANT: Smitson, Glenda
 APPLICANT: Rastelli, Luca
 APPLICANT: MacDougall, John R

QY 458 ProGlnAlaGlnThrIleMetGluGlyArgGluIleLeuLeuLysMetAsnLys 477
 Db 1434 CCACAGACACAGACCATCATGAGGAGAAAGACGTGAGATCCTGCTGAATAAGCAAG 1493
 QY 478 LeuAspValAsnAlaGluAlaGluIleAlaLeuGlnGluIleThrGluSerArgLeu 497
 Db 1494 TTGGAGGTGATCTCTAGGACGTGAGATGCTGCTGCAAGAGCCACAGAGTCCCGACTA 1553
 QY 498 ArgGlyLeuAspGlnGlnLeuAspAspLeuGlnThrLysPheAlaArgLeuLeuAlaGlu 517
 Db 1554 CGAGGCTTACACAGACGTGATGATCTACACAGCAAGTTTCTGCTCCCTCCGCTGAG 1613
 QY 518 LeuGluSerSerAlaLeuLysIleAlaIYArgIleGluArgLeuGluIleThrGlnThrArg 537
 Db 1614 CTGGAGTCCAGCGCATTAAGATTGCTTACCGCATTAAGCGGCTGAGTGCAGACTCGA 1673
 QY 538 GluTrpProMetProGluAspLeuAlaGluAlaAspAspGluGlyGluProGluGluGly 557
 Db 1674 GAGTGGCCATATCCCGAGACCTGCTGAGGCTGATGACGAGGTGAGCTGAGAGGGA 1733
 QY 558 ThrSerLysAspGluGluGlyArgAlaSerGlnGluGlyProProGlyProGlu 575
 Db 1734 ACTTCCAAAGATGAAGAGGAGGCGGCGCAGCCAGAGGAGACCCCGAGTCCAGAG 1787

RESULT 11

US-10-174-333-27

Sequence 27, Application US/10174333
 Publication No. US20040029220A1
 GENERAL INFORMATION:
 APPLICANT: Vernet, Corine A.M.
 APPLICANT: Fernandes, Elma R.
 APPLICANT: Gerlach, Valerie
 APPLICANT: Malyankar, Uriel M.
 APPLICANT: Boldog, Ferenc L.
 APPLICANT: Zethusen, Bryan D.
 APPLICANT: Spyrek, Kimberly A.
 APPLICANT: Majumder, Kumud
 APPLICANT: Tchernev, Velizar T.
 APPLICANT: Padigaru, Muralidhara
 APPLICANT: Patutajan, Meera
 APPLICANT: Burgess, Catherine E.
 APPLICANT: Gangolli, Esha A.
 APPLICANT: Smithson, Glenda
 APPLICANT: Rastelli, Luca
 APPLICANT: MacDougall, John R.
 APPLICANT: Taupier, Raymond J.
 APPLICANT: Groesse, William M.
 APPLICANT: Szekecs, Edward S.
 APPLICANT: Alsobrook, John P.
 APPLICANT: Anderson, David W.
 APPLICANT: Guo, Xiaojia (Sasha)
 APPLICANT: Li, Li
 APPLICANT: Zhong, Mei
 TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
 FILE REFERENCE: 15966-783 CIP1
 CURRENT APPLICATION NUMBER: US/10/174.333
 PRIOR FILING DATE: 2002-06-18
 PRIOR APPLICATION NUMBER: 60/193,664
 PRIOR FILING DATE: 2000-03-31
 PRIOR APPLICATION NUMBER: 60/194,614
 PRIOR FILING DATE: 2000-04-05
 PRIOR APPLICATION NUMBER: 60/195,063
 PRIOR FILING DATE: 2000-04-06
 PRIOR APPLICATION NUMBER: 60/195,066
 PRIOR FILING DATE: 2000-04-06
 PRIOR APPLICATION NUMBER: 60/195,067
 PRIOR FILING DATE: 2000-04-06
 PRIOR APPLICATION NUMBER: 60/195,068
 PRIOR FILING DATE: 2000-04-06
 PRIOR APPLICATION NUMBER: 60/195,069
 PRIOR FILING DATE: 2000-04-06
 PRIOR APPLICATION NUMBER: 60/195,070
 PRIOR FILING DATE: 2000-04-06

QY PRIOR APPLICATION NUMBER: 60/195,510
 Db PRIOR FILING DATE: 2000-04-06
 QY PRIOR APPLICATION NUMBER: 60/219,855
 Db PRIOR FILING DATE: 2000-07-21
 QY Remaining Prior Application data removed - See File Wrapper or PALM.
 Db NUMBER OF SEQ ID NOS: 186
 QY SOFTWARE: CuroSeqList version 0.1
 Db SEQ ID NO: 27
 QY LENGTH: 1835
 Db TYPE: DNA
 QY ORGANISM: Homo sapiens
 Db FEATURE:
 QY NAME/KEY: CDS
 Db LOCATION: (54)..(1787)
 QY US-10-174-333-27

Alignment Scores:

Pred. No.: 0 Length: 1835
 Score: 2957.50 Matches: 575
 Percent Similarity: 99.48% Conservative: 0
 Best Local Similarity: 98.48% Mismatches: 0
 Query Match: 98.95% Indels: 3
 DB: 13 Gaps: 3

US-09-927-267-1 (1-575) x US-10-174-333-27 (1-1835)

QY 1 MetSerGlnAspThrLysValLysThrThrGluSerSerProProAlaProSerLysAla 20
 Db 54 ATGAGCCAGGACACCAAGGTGAACACAGAGTCCAGTCCCGCCAGCCCATCCAGAGCC 113
 QY 21 --ArgLysLeuLeuProValLeuAspProSerGlyAspIYrTYrTYrTYrTYrTYrTYr 39
 Db 114 AGGAGGAAGTGTCT 173
 QY 40 ThrMetValPheProValMetTyrAsnLeuIleIleValCysArgAlaCysPhePro 59
 Db 174 ACAATGCTCTCCAGTCATGATATACCTCATCTCTCTCTCTCTCTCTCTCTCTCTCT 233
 QY 60 AspleuGlnHISGLYTYrLeuValAlaTrpLeuValLeuAspTYrTYrSerAspleuLeu 79
 Db 234 GACTTGACAGCAGGTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 293
 QY 80 TYrLeuLeuAspMetValAlaArgPheHISThr--GlyPheLeuGluGlyIleLeu 98
 Db 294 TACCTACTAGACATGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 353
 QY 99 ValValAspLysGlyArgIleSerSerArgTYrValArgThrTyrSerPhePheLeuAsp 118
 Db 354 GTGGTGACAGAGGTAGGATCTCGAGTCTGTAAGTTCGACCTGAGTTCTTCTTGAGC 413
 QY 119 LeuAlaSerLeuMetProThrAspValValIYrValArgLeuGlyProHisThrProThr 138
 Db 414 CTGGCTTCCCTGAGTCCACAGATGTGCTTACAGTGGCTGGGCGCCGACACACACCC 473
 QY 139 LeuArgLeuAsnArgPheLeuArgAlaProArgLeuPheGluAlaPheAspArgHISGlu 158
 Db 474 CTGAGGCTGAGACCGCTTCTCCGCGGCGCGCGCTTCTGAGGCTTGGACGCGACAG 533
 QY 159 ThrArgThrAlaIYrProAsnAlaPheArgIleAlaLysLeuMetLeuTYrIlePheVal 178
 Db 534 ACCCGACAGCTTACCCCAATGCTTTCGCAATGCGAAGCTGAGTCTTACATTTTTC 593
 QY 179 ValIleHISTrpPanserCysLeuTYrPheAlaLeuSerArgTYrLeuGlyPheGlyArg 198
 Db 594 GTCAATCATTTGGAAGAGTGTCTTACTTTCCTTACCTCCGCTTACCTGGGCTTGGGG 653
 QY 199 AspaIatryValIYrProAspProAlaGlnProGlyPheGluArgLeuArgArgGluTYr 218
 Db 654 GAGCATGGGTGATCCCGGAGCCCGGCGAGCTTGTAGCGCTTGGCGGCGGCGGAGTAC 713
 QY 219 LeuTYrSerPheTYrPheSerThrLeuIleLeuThrValGlyAspThrProProPro 238
 Db 714 CTCTATAGCTTTTACTTCTCCAGCTGATCTGACTGACTGAGTGGCGATACACCGCCGCA 773

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QY 239 AlaArgIuGIuGIuTyrLeuPheMetValGlyAspPheLeuAlaValMetGlyPhe 258
Db 774 GCCAGGGAAGAAGAGTACCTCTTCAATGATGGGCACTTCCTGCGCGATGATGGTTTC 833
QY 259 AlaThrIleMetGlySerMetSerSerValIleTyrAsnMetAsnThrAlaAspAla 278
Db 834 GCCACCATCATGGTAGATAGCTCTCTCATCTTCAACAGAACACATCGACATCGGCT 893
QY 279 PheTyrProAspHisAlaLeuValIleTyrMetIleValIleAsnArgIle 298
Db 894 TTCTAACCATCATGACATGCTGATGAAGAAGTACAGAACGACGACGACGACGACG 953
QY 299 LeuGIuAArgValIleAspTyrTyrGlnHisLeuGlnIleAsnIleValMetThr 318
Db 954 CTGGAGCGGCGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1013
QY 319 GluValAlaIleLeuGlnHisLeuProGIuAArgValAlaValAlaValSerVal 338
Db 1014 GAGGTAGCATCTTACAGACATGCTGATGACGCGCTGCGGCGAGAGTGGTGTCTGT 1073
QY 339 HisLeuSerThrLeuSerArgValGlnIlePheGlnAsnGlyValAlaSerLeu 358
Db 1074 CACCTGTCACCTGACCGCGGTCAGATCTTTCAGAACTGTGAGCGCAGCTGCTGAG 1133
QY 359 GluIleuValIleLeuLeuGIuProGlnThrTyrSerProGIuTyrValCysArg 378
Db 1134 GAGCTGGTCTGAAGCTGACCGCCAGACCTACTCAACGAGGATGATGATGATGATG 1193
QY 379 GlyAspIleGlyGlnIleMetTyrIleIleArgGlnGlnIleuAlaValAlaAsp 398
Db 1194 GAGAGCATTTGGCCAGAGATGATGATGATGATGATGATGATGATGATGATGATG 1253
QY 399 AspGlyIleThrGlnTyrAlaValLeuGlnIleGlyLeuTyrPheGlyGlnIle 418
Db 1254 GATGATATCACACAGATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1313
QY 419 IleAsnIleIle---GlyAsnMetSerGlyAsnArgThrAlaAsnIleSerLeu 437
Db 1314 ATCAACATCAAAAGTGGGAACTGTGGGAACTGTGGGAACTGTGGGAACTGTGG 1373
QY 438 GlyTyrSerAspLeuPheCysLeuSerIleGlyAspLeuArgIleValLeuSer 457
Db 1374 GGTATTTCAGACCTATTCTGCTGACCAAGAGACCTGCGGAGGTGCTGACGATAT 1433
QY 458 ProGlnIleGlnThrIleMetGlnIleGlyArgGlnIleLeuLeuMetAsn 477
Db 1434 CCACAGACACAGACATCATGAGAGAGAAAGACGATGATCTGCTGAATAAGAA 1493
QY 478 LeuAspValAsnAlaGlnAlaIleGlnIleLeuGlnIleAlaThrGlnSer 497
Db 1494 TTGGACGTAAATGCTGAGGAGCTGATGCTGCTGACAGAGGCAACAGATCCG 1553
QY 498 ArgGlyLeuAspGlnIleuAspAspLeuGlnThrIlePheAlaArgLeuLeu 517
Db 1554 CGAGGCTGACAGACGATGATGATGATGATGATGATGATGATGATGATGATG 1613
QY 518 LeuGlnSerSerAlaLeuIleAlaIleArgIleGlnIleGlnIleGlnIle 537
Db 1614 CTGGAGTCCAGCGACATTAAGATGCTTACCGCATTAAGACGCTGAGAGGCA 1673
QY 538 GluTyrProMetProGIuAspLeuAlaGlnIleAlaAspAspGlnIleGln 557
Db 1674 GAGTGGCCATATGCCAGAGCTGCTGAGGCTGATGACGAGGCTGAGGCTGAG 1733
QY 558 ThrSerIleAspGlnIleGlnIleArgAlaSerGlnIleGlnIleProGIu 575
Db 1734 ACTTCCAAAGATGAAGAGGCGAGGCGACGACGAGAGAGAGCCCAAGTCCAG 1787

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; GENERAL INFORMATION:
; APPLICANT: GUEGLER, Karl et al
; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: AND USES THEREOF
; FILE REFERENCE: C000663
; CURRENT APPLICATION NUMBER: US/09/735,932
; CURRENT FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 3
; LENGTH: 10989
; TYPE: DNA
; ORGANISM: Human
; US-09-735-932-3

Alignment Scores:
Pred. No.: 5,45e-259 Length: 10989
Score: 2266.00 Matches: 573
Percent Similarity: 33.01% Conservative: 0
Best Local Similarity: 33.01% Mismatches: 2
Query Match: 75.81% Indels: 1163
Gaps: 5
DB: 9

US-09-927-267-1 (1-575) x US-09-735-932-3 (1-10989)

QY 1 MetSerGlnAspThrIleValIleThrGlnSerProGlnAlaProSerIleVal 20
Db 3000 ATGAGCCGAGACCCAAAGTGAAGACACAGATCCATCCCGAGCCCATCAAGGCC 3059
QY 20 ----- 20
Db 3060 AGGTGAAGTCCGTGCTCTGTGTGGATCTCTCATTCCTTGTGTCGCCAGTTC 3119
QY 21 ----- Argly 22
Db 3120 ACACATCAAGCTTGAATGCTGATGAATGAAGACACCTTCTTTCACAGGA 3179
QY 22 sLeuIleProValIleuAspProSerGlyAspTyrTyrTyrTyrIleValAsnThrMetVal 42
Db 3180 GTTGTGCTGCTGCTGACACCATCTGGGATTAATGATGATGATGATGATGATGATG 3239
QY 42 ILeuProValMetTyrAsnIleIleVal----- 53
Db 3240 CTTCACATGATGATTAACCTCATCATCTCTGTGACAGATGACAGCGTGTCTTAAGGG 3299
QY 53 ----- 53
Db 3300 AGGAGCTGGAAGCCAAAGAGACTAAAGAGAGTCAAGAGAGGAGGACCTTGGT 3359
QY 53 ----- 53
Db 3360 GGGGAGAGAGGACATTCATGGAGAGGCTGAGAGGAGGTTAAGGCGCTGGAGG 3419
QY 54 ----- CysArgly 56
Db 3420 GAGCGCTGACACAGAGGCTCCCTTAATCAATCATGCTTAACCTGCGCTGAGAG 3479
QY 56 aCysPheProAspLeuGlnHisGlyTyrIleValAlaThrLeuValIleuAspTyrThrSe 76
Db 3480 CTGCTTCCCGCATGTCACACAGGTTATCTGGTGGCTGCTGCTGCTGCTGCTGCTG 3539
QY 76 rAspLeuLeuTyrLeuLeuAspMetValAlaArgPheHisThr----- 90
Db 3540 TGAATGCTTAATCACTAATGATGATGATGATGATGATGATGATGATGATGATG 3598
QY 90 ----- 90
Db 3599 GGAATGACCTTTGTCCACATTCCTTCTTAAGATAGCACTTAAGAGTAACAAGAA 3658
QY 90 ----- 90
Db 3659 AGGACACCCACCGGTGTAGACCTTGGGTGCTGTATGCTGACAGCATCCCAAGTCT 3718

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QY	90	-----	90	QY	306	-----	306
Db	3719	CAACCCGAAAGCCGGAGACAGATTATGCTGCTCCACTCTGCTTCAGACAGTCTC	3778	Db	4799	TGGAAGAGTGGGTGAAGAAGGCAATCCCCCTTGAAATGCTCAGCAACAGATCATTG	4858
QY	90	-----	90	QY	306	-----	306
Db	3779	CCTGGCTGCTGGGAGCTCATGCTCAAGCCCAAGCTTGACTACAGCAGTCCGCTCC	3838	Db	4859	GCTACCTATGTGATTCATCTGTGACTGAAACAAAGAGAGTGCACAAAGTTGGGAA	4918
QY	91	-----	91	QY	306	-----	306
Db	3839	TACCGGCTCCCTCTCCCAAGATTCTTGAAACAGGSCATCTGCTGTGGAAGAAGGTTAG	3898	Db	4919	GTAGACAGAGGATCCCAAGAGAGGAGCCCTTGCTGCTGAGGTAAAGGTAGG	4978
QY	104	gllleSerSerArgIYrValArgThrTySerPhePheLeuAspLeuAlaSerLeuMetPr	124	QY	306	-----	306
Db	3899	GATCTGAGTCCCTACGTTCGACCTGGAGTTCTTCTTGACCTGCTTCCCTGATGCC	3958	Db	4979	GGTGAAACAAGCATCATCTGATTGGTGGTGAAGCTGATAGAGGTGAAGGTT	5038
QY	124	oThrAspValValTYrValArgLeuGlyProHisThrProThrLeuArgLeuAsnArgPh	144	QY	306	-----	306
Db	3959	CACAGATGTGTCTACGTGCGGCTGGGCCCGACACACACCCTGAGGCTGAACCGCTT	4018	Db	5039	ATGTAAAGTGTAGAGGTGTCTATGCCCTGAAACAGTAATCCACTGTCAAGTACTC	5098
QY	144	eLeuArgAlaProArgLeuPheGluAlaPheAspArgThrGluThrArgThrAlaTyPr	164	QY	306	-----	306
Db	4019	TCTCCGCGCGCCCGCTCTTGAAGSCCTTCGACCGCACAGAACCCGACAGCTTACCC	4078	Db	5099	CCATGACCCCTGTAGATCTAGTATGCTGGGATTTCTTGCTGAGCTGAGCTGACCTC	5158
QY	164	oAsnAlaPheArgIleAlaLysLeuMetLeuTyrllePheValValIleHisTyrPAsnSe	184	QY	306	-----	306
Db	4079	AAATCCCTTGCATTGCCAACAGCTGATGCTTACATTTTTCGTCATCCATTGGAAACAG	4138	Db	5159	GAAAGAGGATGAGAGGACGACATTAAGGCTGTGAAGAAATGGCACTGCTCTACT	5218
QY	184	rCysLeuTYrPheAlaLeuSerArgTYrLeuGlyPheGlyArgAspAlaTyrPAlaTyPr	204	QY	307	-----	307
Db	4139	CTGCTTATACCTTGGCCCTATCCCGGTAACCTGGGCTTGGGCGTGACGATGGGTGTACCC	4198	Db	5219	CTCAGGTATCAGACCTGCAGATCAAGAAAGATGACCAACAGAGTACCTTCAACG	5278
QY	204	oAspProAlaGlnProGlyPheGluArgLeuArgArgGlnTYrLeuTYrSerPheTyPh	224	QY	325	HisLeuProGluArgLeuArgAlaGluValAlaValSerValHisLeuSerThrLeuSer	344
Db	4199	GGACCCCGCAGCCTGGCTTGAAGCGCTGGCGGCGCAATACCTTATAGCTTTTACTT	4258	Db	5279	CACCTGCTGACCGGCTGCGGAGAGAGTGCCTGTCTGTGACCTGTCCACTCTGAGC	5338
QY	224	eSerThrLeuLeuLeuThrThrValGlyAspThrProProProAlaArgGluGluTYr	244	QY	345	ArgValGlnIlePheGlnAsnCysGlnAlaSerLeuLeuGluGluValLeuValLeuLysLeu	364
Db	4259	CTCACGCTGATACGACTACAGTGGCGATACACCGCGCACGCAAGGAAGAAGACTA	4318	Db	5339	CGGCTGAGATCTTTCAGAACTGTGAGGCCAGCTGCTGGAGAGCTGTCTGAAGCTG	5398
QY	244	rLeuPheMetValGlyAspPheLeuLeuAlaValMetGlyPheAlaThrIleMetGlySe	264	QY	365	GlnProGlnThrTYrSerProGlyGluTYrValCysArgLysGlyAspIleGlyGlnGlu	384
Db	4319	CCTCTTACGTGGGCGACTTCCTGCTGCGCTCATGGGTTTTCGCAACATCATCGGGTAG	4378	Db	5399	CAGCCCCAGACTTACTCAACCAAGTGAATATATATATATATATATATATATATATAT	5458
QY	264	rMetSerSerValIleTYrAsnMetAsnThrAlaAspAlaAlaPheTYrProAspHisAla	284	QY	385	MetTYrIleIleIleArgGluGluGluLeuAlaValAlaAspAspGlyIleThrGlnTYr	404
Db	4379	CATGAGCTCTGTCACTTACAAACATGAACACTGCAGATGCGCTTTCTACCCAGATCATGC	4438	Db	5459	ATGTACATCATCCAGAGGGGTCAACTGGCGGTGGCAAGTATGATGATCATCACAGTAT	5518
QY	284	AlaValLysLysTYrMetLysLeuGlnHisValAsnArgLysLeuGluArgArgValIle	304	QY	405	AlaValLeuGlyAlaGlyLeuTYrPheGlyGlnIleSerIleIleAsnIleLys-----	422
Db	4439	ACTGATGAAGAAGTACATGAAGCTGCAGACATGTCACCGCAAGCTGGAGCGCAAGTTAT	4498	Db	5519	GCTGTCTCGTGCAGGGCTCTTACTTTGGGAGATGACATCATCAATCAATCA-AGGTGG	5577
QY	304	eAspTyr-----	306	QY	422	-----	422
Db	4499	TGACTGTGAGAAAGCGGGGTTCCAGACACAGACAGGACCAAGTATGATGAAACT	4558	Db	5578	GTATCCAGATATTTGTTCCAGGAGCAAGGATGGGTGAGGGGGAACAGCAGACCCC	5617
QY	306	-----	306	QY	422	-----	422
Db	4559	GAGGAGGTAACTGGGTCTTATAGCTGTGAGCAGCAGCAAGGCTGTCAAAATGTAGCA	4618	Db	5638	AGTGTGGACCAAGATATACTTTCAGGCTTAACTTGTATGTAGAAACCTGGCCCTTC	5697
QY	306	-----	306	QY	422	-----	422
Db	4619	TTGACCGGTGGTTGTGCTGGGCTTGAAAAAGGAACCTTTTCAACTGAGGGAA	4678	Db	5698	TCTGAGTCACTAATGCTCAGAGAAAAAACAACATAGAGATCCATTCCTGAGAAG	5757
QY	306	-----	306	QY	422	-----	422
Db	4679	TCAGACTTGGGAGGGGTAGGTAGAGACTGATAGAGAGAGAGCTCATACTCAAAAA	4738	Db	5758	AAGCTGAGCAAGGCAAGTGAACAGGGGTGGGTTGTGGAAGAGAGAGTACACTTGTCTG	5817
QY	306	-----	306	QY	422	-----	422
Db	4739	AGGATAATATGAGACCAAGGAATGGGAATGCCACTGCTGTGATGGGCTCAGAAAGCTC	4798	Db	5818	TGGATATTCCTGTAAGCAACCAATAGACTAGTGACAGTATGATGATATATATATATAT	5877
QY	4739	AGGATAATATGAGACCAAGGAATGGGAATGCCACTGCTGTGATGGGCTCAGAAAGCTC	4798	QY	422	-----	422

Db	5878	AATAGTAATATTTATTACTGCTTACTGCATCCCTTTTCTAAGTCTTCAATGATAT	5937
Qy	422	-----	422
Db	5938	TAACTCATTAATTCGGCAGCACTTCTATAGATAAGTACTATTCTTATTCCAATTTTA	5997
Qy	422	-----	422
Db	5998	AAGATAAGAAATCAAACTCAAGAAAGTGGTAATTGCCCAACGTGCACAGATATAC	6057
Qy	422	-----	422
Db	6058	ACATGTGGATGATGGAAAAAACACTTTTACAGCCAAAGTGAAGAAAGATAGA	6117
Qy	422	-----	422
Db	6118	AGAGAAAGTTCCCATTTACTGACATCACTCTAGGCCAAGCTACTACTG	6177
Qy	422	-----	422
Db	6178	GCTTGCTTTTCTCTCATCAGCCCTGTGAGTAGAAATGTATGCTTAATCAGAGTA	6237
Qy	422	-----	422
Db	6238	TTAGGCATGAGTGTGTGACAGAGAAATCCTGCAATGGGGTAAAGCACTGTGATGA	6297
Qy	422	-----	422
Db	6298	CCGAAAGCTGGATGTCTGTGCTCTCTCAGCATGAGATTTCTACCTCAGGGATTCG	6357
Qy	422	-----	422
Db	6358	AAAGCTCAGACTGTGTCTCCATGATCCCTCAAGTCCACATCTGTATGTAGGA	6417
Qy	422	-----	422
Db	6418	TGCTGTCTGTGACTTTGAGCACTCATTTCCCTATTAGGCTCAGTTTATCACTTA	6477
Qy	422	-----	422
Db	6478	TCCATGAGGACATATATMAAACCAATGAGTATTTGTAGAAATMAATGACTATGTG	6537
Qy	422	-----	422
Db	6538	AGTAGGATCCAGCGCAGTGTGGCATACAGCAAGTGTCAACAATATGATGCTCCT	6597
Qy	422	-----	422
Db	6598	TTCCCTTGTCAAGGTCTTCTAGCTTAAGACTTTGACATTCAGCTCACTATCTC	6657
Qy	422	-----	422
Db	6658	CCCACCATTTCTCACCAACATCTTTCTAAGCTGCAAGAAATATCATAGCTCCCTGCT	6717
Qy	422	-----	422
Db	6718	TAAATATCTCAATAGTTTCTACTAGCCCTCAGCATTAAGCCTGAACCTTCATGTAC	6777
Qy	422	-----	422
Db	6778	TTATGAGACCCAGTGTGACCTAGATCTCCCTCTCCACCCCTCCCAACCTGTGGCTT	6837
Qy	422	-----	422
Db	6838	CTCGACCTGCAAGCTTACTATTTTCTGACATCAAGTACTTTTCTAACCCCTTCC	6897
Qy	422	-----	422
Db	6898	CTCTGTCTGCTCCTTCTCTGTGCTAGATGCTCCATCCCACTTGTCCCTCCTCC	6957
Qy	422	-----	422

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Qy	422	-----	422
Db	7018	TATCTGACTGTGATTAATTAAGAAAAAGAGTTTAATTGGCTCAGTCTTCAGGA	7077
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Db	7078	TTTACGGAAAGCATGTGTGCTGCACTTTGTCACTCTTAGGAGGCTTCAAGAACTTAT	7137
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Qy	422	-----	422
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Db	7738	ACAGGAACATGTCTGGGAACCGCGCAGCAACATCAAGAGCTAGTTATTCAGAC	7797
Qy	442	LeuPheCysLeuSerIysGluAspLeuArgIleValIleSerGluTyrProGlnIaGln	461
Db	7798	CTATTCTGCTGAGCAAGAGGACCTGCGGAGGTGTAGGAGATATCAAGACACAG	7857
Qy	462	ThrIleMetGluGluIysGlyArgGluIleLeuLeuIysMetAsnIysLeuAspValaen	481
Db	7858	ACCATCATGAGAGAGAGAGAGAGCTGAGATCTGTCTAATAAGCAAGTTGACGTGAAT	7917
Qy	482	AlaGluAlaIaGluIleAlaLeuGlnGlnIaThrGluSerArgLeuArgGlyLeuAsp	501
Db	7918	GCTGAGGACGTGAGATGCCCTCGCAGGAGGCGACAGAGCTCCGGCTACAGGCTTAGAC	7977
Qy	502	GlnGlnLeuAspAspLeuGlnThrIysPheAlaArgLeuLeuAlaIleuGlnIysSer	521
Db	7978	CAGCAGCTGATGATCTACAGCAACCAAGTTGCTCGCTCTGCTGAGCTGAGTCCAGC	8037
Qy	522	AlaLeuIysIleAlaIleArgIleGluArgLeuGluIleProIleThrArgIleTyrProMet	541
Db	8038	GCATTAAAGTTGCTTACCGCATTTGAAGGCTGGAATGGAGACTCGAAGTGGCCATG	8097

QY	306	-----	306	QY	422	-----	422
Db	4559	GAGGAGGTAACTGGTCTCTAGTGCCTGTGAGCCAGCAAGCTGTCAAAATGTACGA	4618	Db	5638	AGTGTGGGACCAAGTAAGTACTTCAAGGCTTAACCTTCTGATTGAGAAACCTGGCCCTTC	5697
QY	306	-----	306	QY	422	-----	422
Db	4619	TTGACCCGTGGTTTGTCTGGCTGGGGCTTGGAAAAAGGAACTTCTTCACTGAGGGA	4678	Db	5698	TCTGAGTCACTAGATGCTCAGAGAAAAACAACATAGAGATCCATTCCTGAGAA	5757
QY	306	-----	306	QY	422	-----	422
Db	4679	TCAGACTTGGGGGAGGGGTAGTAAGAACTGATAGGGAGAGAGCTCATCTCAAAAA	4738	Db	5758	AAGTGACCAAGGCCAGTGAAACAGGGTGGTTTCTGGAAGAGAGATGACTTCTCTG	5817
QY	306	-----	306	QY	422	-----	422
Db	4739	AGGATATATATGAGACCAAGGAATGGGAATGCCACTGCTGTAGGGCTCAGAAAGCTC	4798	Db	5818	TGATATTACCTGAAGACCAATAGACTAGTGAACATGATAGATATATATATATAT	5877
QY	306	-----	306	QY	422	-----	422
Db	4799	TGGAAGAGTGGGTGAAGAAGGCAATCCCCCTGAGATGTGTACGAACAAGATCATTTG	4858	Db	5878	AATAGCTATATATTATTAACCTGCTTACTGTCATCCCTTTTCTTAAGTCTTCATATAT	5937
QY	306	-----	306	QY	422	-----	422
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QY	307	-----	307	QY	422	-----	422
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QY	325	HisLeuProGluArgLeuArgAlaGluValAlaValSerValHisLeuSerThrLeuSer	344	Db	6358	AAAGCTCAATCTGTCTCTCCATGATCCCTCAAGTCCCATCTGTATGTGTAGGA	6417
Db	5279	CACCTTGCTGAGCGGCTGCGGAGAGGTGCTGTGTGCTGTGCACTGTCCACTTGAGC	5338	QY	422	-----	422
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QY	385	MetTyrIleIleArgGlnGlyGlnLeuAlaValAlaAspAspGlyIleThrGlnTyr	404	Db	6538	AGTGAAGCATTCAGGCGCATGTGCTTGGCATACAGCAAGTGTTCACAAATATAGTCCCT	6597
Db	5459	ATGTAT	5518	QY	422	-----	422
QY	405	AlaValLeuGlyAlaGlyLeuTyrPheGlyGlyIleSerIleIleAsnIleLys-----	422	Db	6598	TTCCCTTGTCAAAGTCTTCTTAGCTTAAGACTTGTGACATTCAGCCTCATATCTC	6657
Db	5519	GCTGTGCTGTGTGAGGCTCTTACTTTGGGAGATGACATCATCAATCAATCAATCAAT	5577	QY	422	-----	422
QY	422	-----	422	Db	6658	CCACCCATTTCCACCAACATCTTTCTAAATGCAAAAGATATCATACAGCTCCTGCT	6717
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QY 422 ----- 422
Db 6778 TTAATGAGACCCAGTGTGACCTAGATCTCCCTCTCTCCACCCCTCCCACTCTGCGCTT 6837
QY 422 ----- 422
Db 6838 CTGCACTCTGAACCTGCTTACTATTTTCTGATCCAACTGACTCTTTTCTAACCCTTCC 6897
QY 422 ----- 422
Db 6898 CTCTGTTCTGCTCCTCTCCTCTGCTGATGATGCCCTATCCCACTTGTCCCTCTCCTCC 6957
QY 422 ----- 422
Db 6958 CCTAGTACTCTCTCACTCAAGTGTATGAGACTGTCTTTCATTTCTATMAAGAA 7017
QY 422 ----- 422
Db 7018 TATCTGAGACTGGATATTATTAAGAAAGAGTTTAAATGGCTCAGCTTCTTCAGGA 7077
QY 422 ----- 422
Db 7078 TTTACGGAGAGATGGTGTGCTGCAATTGCTCAGCTTCTAGGAGGCTTCAGAGAGCTTAT 7137
QY 422 ----- 422
Db 7138 AATTGTGAGAGAGGCAAGGGGAGAGGAGCATGTTCACAGGTGAAGAGAGAGCAAGGG 7197
QY 422 ----- 422
Db 7198 TTGGGGAGGTGCACACTTTTCAACCAACCAACCAACAGCTGTGACTCACTAATCA 7257
QY 422 ----- 422
Db 7258 AAGACAGATCAAGGCATGAGAGATTCGCCCCCATATTCATCACTTCCACAGGTCC 7317
QY 422 ----- 422
Db 7318 CACCCCCAATTTGGGGATTACATTTTCACATGAGATTGGGAGAGACAAATATTCAAT 7377
QY 422 ----- 422
Db 7378 TATATCTAGACATCCCTCTCTCCAGACTTCCCTAAATTCCTGCTTACGGTTTGTA 7437
QY 422 ----- 422
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QY 422 ----- 422
Db 7498 ACTGTTATATTAATCTATTCGAATATATGTGTATCTCTCTAGACTGTGAATTTTGAAGC 7557
QY 422 ----- 422
Db 7558 AGGTCACTGATACCTACCCAGCATGAGGCTGTGCCAGATGTTACTAATGAAGA 7617
QY 422 ----- 422
Db 7618 TTAATGAGCAGAGAGAGAGGCTCAGAAACAAATATGAGGTGAAGTCTGTGAG 7677
QY 422 ----- 422
Db 7678 GAGTGAATGCGACCTCTCCTCACTCTTACTACTCTCCCACTCTGCCCATGAGCC 7737
QY 422 ----- 422
Db 7738 AAGGGAACATGTCTGGGAGACCGCGCAGCAGCATCAAGAGCTTGGTTATTCAGAC 7797
QY 442 LeuPheCysLeuSerIleuGluAspLeuArgIleValLeuSerGluTyrProGlnAlaGln 461

Db 7798 CTAATCTGCTTGAAGAGAGGAGGAGCTGCGGAGGTGCTGAGCGATATCCAGAGCAG 7857
QY 462 ThrIleMetGluGluIleuArgIleValLeuIleuValMetAsnIleuSerValAsn 481
Db 7858 ACCATCATGAG 7917
QY 482 AlaGluValAlaGluValIleValLeuGluGluValIleValIleValIleValIleVal 501
Db 7918 GCTGAGGAG 7977
QY 502 GlnGlnIleuAspAspLeuGlnIleuValIleuValIleuValIleuValIleuValIleu 521
Db 7978 GAGCAGCTGAGATGATCTACAGACCAAGTTGCTGCTCTGCTGCTGAGCTGAGAGCTCAGC 8037
QY 522 AlaLeuValIleValIleuValIleuValIleuValIleuValIleuValIleuValIleu 541
Db 8038 GCACTTAAGATTGCTTACCGCATTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 8097
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Db 8098 CCCGAG 8157
QY 562 GlnGluGluValArgAlaSerGlnGluGluGluGluGluGluGluGluGluGluGlu 575
Db 8158 GAAGAGGAG 8199

RESULT 14
US-10-295-573-1
; Sequence 1, Application US/10295573
; Publication No. US2003015751A1
; GENERAL INFORMATION:
; APPLICANT: Karpen, Jeffrey W.
; APPLICANT: Rich, Thomas C.
; APPLICANT: Cooper, Dermot M.F.
; APPLICANT: Schack, Jerome
; TITLE OF INVENTION: MODIFIED CYCLIC NUCLEOTIDE GATED ION CHANNELS
; FILE REFERENCE: USC-07536
; CURRENT APPLICATION NUMBER: US/10/295,573
; CURRENT FILING DATE: 2002-11-15
; PRIOR APPLICATION NUMBER: 60/332,494
; PRIOR FILING DATE: 2001-11-16
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 3027
; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-295-573-1

Alignment Scores:
Pred. No.: 5,76-176 Length: 3027
Score: 1565.00 Matches: 293
Percent Similarity: 74.03% Conservative: 106
Best Local Similarity: 54.36% Mismatches: 134
Query Match: 52.36% Indels: 6
DB: 15 Gaps: 2

US-09-927-267-1 (1-575) x US-10-295-573-1 (1-3027)

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QY 38 LeuSerIleuValIleuValIleuValIleuValIleuValIleuValIleuValIleuValIleu 57
Db 775 TTGTTTGTCAATGCCAGCTGTCTTTTCAACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 834
QY 58 PheProAspLeuGlnIleuValIleuValIleuValIleuValIleuValIleuValIleuValIleu 77
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QY 78 LeuIleuValIleuValIleuValIleuValIleuValIleuValIleuValIleuValIleuValIleu 97

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 QY 138 ThrLeuArgLeuAsnArgPheLeuArgAlaProArgLeuPheGluAlaPheAspArgThr 157
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 Db 1195 GTATCATCTCCTGGAATGCTGTGATTTATTTATTTATTTTAAAGCCATTTGGCTTTGGA 1254
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 QY 516 AlaGluLeuGluSerSerAlaLeuLysIleAlaTyrArgIleGluArgLeuGluTrpGln 535
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 US-10-087-217-1
 ; Sequence 1, Application US/10087217
 ; Publication No. US20030100059A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Aptus Genomics, Inc.
 ; APPLICANT: YAO, Yong
 ; APPLICANT: CAO, Liang
 ; TITLE OF INVENTION: No. US20030100059A1 Cell-Based Assays for G-Protein-Coupled Receptors
 ; FILE REFERENCE: 53735-5004-US
 ; CURRENT APPLICATION NUMBER: US/10/087,217
 ; PRIOR FILING DATE: 2002-03-04
 ; PRIOR APPLICATION NUMBER: 60/330,663
 ; NUMBER OF SEQ ID NOS: 8
 ; SOFTWARE: Patent In version 3.1
 ; SEQ ID NO 1
 ; LENGTH: 1995
 ; TYPE: DNA
 ; ORGANISM: Rattus norvegicus
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (1)..(1992)
 ; OTHER INFORMATION:
 ; US-10-087-217-1
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 Score: 1558.00 Matches: 292
 Percent Similarity: 73.84% Conservative: 106
 Best Local Similarity: 54.17% Mismatches: 135
 Query Match: 52.12% Indels: 6
 Gaps: 2
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 Db 436 TTGTTGTCATTGCCATGCTGCTTCTTAAACCTGATGCTGCTGTGTGTGCGCAGAGCTGC 495
 QY 58 PheProAspLeuGlnHisGlyTyrLeuValAlaTrpLeuValLeuAspTyrThrSerAsp 77
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OY	118	AspLeuAlaSerLeuMetProThrAspValValTyrValArgLeuGlyProHisThrPro	137
Db	676	GATGTGGCTTTCATCATCTCCACTGACCTTATATTGTCGTGGGTATCCACAGCCT	735
OY	138	ThrLeuArgLeuSnaArgPheLeuArgAlaProArgLeuPheGluAlaPheAspArgThr	157
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OY	158	GlnThrArgHisAlaTyrProAsnAlaPheArgIleAlaLysLeuMetLeuTyrIlePhe	177
Db	796	GAGCACAGCACAGCTACCCCAACATCTTCGATAGACAATCGGTCCCTTTAACATCTTG	855
OY	178	ValValIleHisTrpAsnSerCysLeuTyrPheAlaLeuSerArgTyrLeuGlyPheGly	197
Db	856	GTCATGTCACACTGGAAATGCTGTATTTATTTATTTATTTTAAAGCTCACTGGCTTTCTTA	915
OY	438	ProGlnAlaGlnThrIleMetGlnGluGlySGlyArgGluIleLeuLeuMetAsnLys	477
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OY	478	LeuAspValAsnAlaGluAlaLa-----GluIleAlaLeuGlnGluAlaThrGlnSer	495
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OY	496	ArgLeuArgGlyLeuAspGlnGlnLeuAspLeuGlnThrTyrPheAlaArgLeuLeu	515
Db	1804	AAGCTGGAACAGTTGGAGCAACAACATGATACCTTGACACCTGTTGCCCGCTGCTG	1866
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Db	1864	GCTGAGTACACATGGGGCCGACGACGAAGCTCAAGCAACCATCACAGTCTGAGACCAAG	1923
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GenCore version 5.1.6
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OM protein - protein search, using SW model

Run on: September 11, 2004, 00:41:10 ; Search time 450 Seconds
(without alignments)
409.770 Million cell updates/sec

Title: US-09-927-267-1

Perfect score: 2989

Sequence: 1 MSQDTKYKTTSSPPAPSKA.....EGTSKDEGRASQEGPPE 575

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BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1335176 seqs, 320689617 residues

1335176

Total number of hits satisfying chosen parameters:

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Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications AA:*

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- 2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
- 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
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- 12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
- 13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
- 14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
- 15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
- 16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
- 17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
- 18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2989	100.0	575	9 US-09-735-932-2	Sequence 2, Appli
2	2989	100.0	575	9 US-09-927-267-1	Sequence 1, Appli
3	2989	100.0	575	14 US-10-207-951-2	Sequence 2, Appli
4	2984	99.8	575	10 US-09-842-758-30	Sequence 30, Appli
5	2984	99.8	575	12 US-10-174-333-30	Sequence 30, Appli
6	2984	99.8	575	16 US-10-311-624-1	Sequence 1, Appli
7	2957.5	98.9	578	10 US-09-842-758-28	Sequence 28, Appli
8	2957.5	98.9	578	12 US-10-174-333-28	Sequence 28, Appli
9	2811	94.0	575	9 US-09-735-932-4	Sequence 4, Appli
10	2811	94.0	575	9 US-09-927-267-16	Sequence 16, Appli
11	2811	94.0	575	10 US-09-842-758-74	Sequence 74, Appli
12	2811	94.0	575	12 US-10-174-333-74	Sequence 74, Appli
13	2394	80.1	1704	14 US-10-207-951-4	Sequence 4, Appli
14	1568	52.5	663	14 US-10-029-677-16	Sequence 16, Appli
15	1565	52.4	664	14 US-10-295-573-5	Sequence 5, Appli

16	1562	52.3	664	9 US-09-735-927-4	Sequence 4, Appli
17	1562	52.3	732	10 US-09-842-758-73	Sequence 73, Appli
18	1562	52.3	732	12 US-10-174-333-73	Sequence 73, Appli
19	1562	52.3	732	14 US-10-029-677-15	Sequence 15, Appli
20	1558	52.1	664	14 US-10-029-677-18	Sequence 18, Appli
21	1558	52.1	664	14 US-10-087-217-2	Sequence 2, Appli
22	1558	52.0	664	14 US-10-295-573-8	Sequence 8, Appli
23	1554	52.0	634	14 US-10-295-573-7	Sequence 7, Appli
24	1554	52.0	664	14 US-10-087-217-6	Sequence 6, Appli
25	1554	52.0	664	14 US-10-295-573-6	Sequence 6, Appli
26	1548.5	51.8	694	10 US-09-842-758-75	Sequence 75, Appli
27	1549.5	51.8	694	12 US-10-174-333-15	Sequence 75, Appli
28	1549.5	51.8	694	12 US-09-855-828-14	Sequence 14, Appli
29	1549.5	51.8	694	14 US-10-345-680-26	Sequence 26, Appli
30	1549	51.8	664	14 US-10-087-217-4	Sequence 4, Appli
31	1547	51.8	664	14 US-10-029-677-17	Sequence 17, Appli
32	1545	51.7	664	14 US-10-087-217-8	Sequence 8, Appli
33	1538.5	51.5	690	12 US-09-855-828-15	Sequence 15, Appli
34	1535	51.4	664	9 US-09-735-927-2	Sequence 2, Appli
35	1535	51.4	664	13 US-10-034-843-2	Sequence 2, Appli
36	1535	51.4	664	14 US-10-168-651-7	Sequence 7, Appli
37	1535	51.4	664	14 US-10-114-153-18	Sequence 18, Appli
38	1532	51.3	664	14 US-10-029-677-24	Sequence 24, Appli
39	1529	51.2	664	14 US-10-029-677-2	Sequence 2, Appli
40	1208	40.4	239	15 US-10-189-507-10	Sequence 10, Appli
41	1196	40.0	239	15 US-10-189-507-6	Sequence 6, Appli
42	779	26.1	239	15 US-10-189-507-5	Sequence 5, Appli
43	773	25.9	239	15 US-10-189-507-9	Sequence 9, Appli
44	769	25.7	239	15 US-10-189-507-12	Sequence 12, Appli
45	655	21.9	809	12 US-09-855-828-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-735-932-2
; Sequence 2, Application US/09735932
; Patent No. US20020037548A1
; GENERAL INFORMATION:
; APPLICANT: GUEGLER, Karl et al
; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUM AN TRANSPORTER PROTEINS,
; FILE REFERENCE: C1000663
; CURRENT APPLICATION NUMBER: US/09/735, 932
; CURRENT FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 575
; TYPE: PRT
; ORGANISM: Human
US-09-735-932-2

Query Match 100.0%; Score 2989; DB 9; Length 575;
Best local similarity 100.0%; Pred. No. 2.8e-266;
Matches 575; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY	61	LQHGXYVAMVLVDYTSLLVLLDMVVFPHGFLFQGLIVVDKGRISRYVTSFPLDLA	120
DB	61	LQHGXYVAMVLVDYTSLLVLLDMVVFPHGFLFQGLIVVDKGRISRYVTSFPLDLA	120
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DB	121	SIMPTDVVYVRLGHTPTLRLNRLRFLRPLFEADRTRTRAYVNAFRIAKLMYIFVVI	180
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DB	181	HMNSCLYFALSRYIGFGRDAVYVDPDAPQPFERILRQYLYSFYSTLLITTVGDTTPPAR	240

Db 181 HNSCLYFALSRYLGFGRDAMVYPPAPQGFERLRQVLYSFYSTLLITTVGDTPPAR 240
QY 241 EEEYLFMWGDFLLAVMGFATIMGSMSSVYNNMTADAAFYDPHALVKKYMLOHVNRLKE 300
Db 241 EEEYLFMWGDFLLAVMGFATIMGSMSSVYNNMTADAAFYDPHALVKKYMLOHVNRLKE 300
QY 301 RRVIDWYQHLQINKKMTNEVALIQLPRLRAEVAVSVHLSLTSRVQIFONCEASLLEEL 360
Db 301 RRVIDWYQHLQINKKMTNEVALIQLPRLRAEVAVSVHLSLTSRVQIFONCEASLLEEL 360
QY 361 VLKLPQPTSPGFEYVCRKGDIGQEMYYIIRBQLAVVADGITOYAVLAGYFGBISITIN 420
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QY 421 IKGNMGNRRRTANIKSLGYSDLFCLSKEDLREVLSYEQAOCTIMEKREILLKNNKLDV 480
Db 421 IKGNMGNRRRTANIKSLGYSDLFCLSKEDLREVLSYEQAOCTIMEKREILLKNNKLDV 480
QY 481 NAAAEIALQATSRRLKGLDQDLDDIQTKEFARLAELESSALKIAYRIERLEWQTRMP 540
Db 481 NAAAEIALQATSRRLKGLDQDLDDIQTKEFARLAELESSALKIAYRIERLEWQTRMP 540
QY 541 MPEDLAEDDEGEPEEGTSKDEGRASQEGPPGE 575
Db 541 MPEDLAEDDEGEPEEGTSKDEGRASQEGPPGE 575

RESULT 2

US-09-927-267-1
; Sequence 1, Application US/09927267
; Publication No. US20020182691A1
; GENERAL INFORMATION:
; APPLICANT: Creech, Christopher D.
; APPLICANT: Jegla, Timothy J.
; APPLICANT: ICGen, Inc.
; TITLE OF INVENTION: CNG2B: A No. US20020182691A1 Human Cyclic Nucleotide-Gated Ion
; TITLE OF INVENTION: Channel
; FILE REFERENCE: 018512-006510US
; CURRENT APPLICATION NUMBER: US/09/927,267
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: US 60/226,253
; PRIOR FILING DATE: 2000-08-17
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; LENGTH: 575
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: cyclic nucleotide-gated cation channel 2B (CNG2B)
US-09-927-267-1

Query Match 100.0%; Score 2989; DB 9; Length 575;
Best Local Similarity 100.0%; Pred. No. 2.8e-266;
Matches 575; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MSQDTKXVTSSPPAPSKARKLLPVLDPSGDYYWMLNTWFPVYNNLIILVCRACFPD 60
Db 1 MSQDTKXVTSSPPAPSKARKLLPVLDPSGDYYWMLNTWFPVYNNLIILVCRACFPD 60
QY 61 LOHGLVAMLVLDYSDLLIYLLDMVVRFTGFLBEGILVVDKGRISSRVVRWSSFLLDA 120
Db 61 LOHGLVAMLVLDYSDLLIYLLDMVVRFTGFLBEGILVVDKGRISSRVVRWSSFLLDA 120
QY 121 SLMPDYYVYVRLGPHPTPLRLNRFARAPRLFEAFRTETRTAYPAAPRIAKMLIYFVYI 180
Db 121 SLMPDYYVYVRLGPHPTPLRLNRFARAPRLFEAFRTETRTAYPAAPRIAKMLIYFVYI 180
QY 181 HNSCLYFALSRYLGFGRDAMVYPPAPQGFERLRQVLYSFYSTLLITTVGDTPPAR 240
Db 181 HNSCLYFALSRYLGFGRDAMVYPPAPQGFERLRQVLYSFYSTLLITTVGDTPPAR 240
QY 241 EEEYLFMWGDFLLAVMGFATIMGSMSSVYNNMTADAAFYDPHALVKKYMLOHVNRLKE 300

Db 241 EEEYLFMWGDFLLAVMGFATIMGSMSSVYNNMTADAAFYDPHALVKKYMLOHVNRLKE 300
QY 301 RRVIDWYQHLQINKKMTNEVALIQLPRLRAEVAVSVHLSLTSRVQIFONCEASLLEEL 360
Db 301 RRVIDWYQHLQINKKMTNEVALIQLPRLRAEVAVSVHLSLTSRVQIFONCEASLLEEL 360
QY 361 VLKLPQPTSPGFEYVCRKGDIGQEMYYIIRBQLAVVADGITOYAVLAGYFGBISITIN 420
Db 361 VLKLPQPTSPGFEYVCRKGDIGQEMYYIIRBQLAVVADGITOYAVLAGYFGBISITIN 420
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QY 481 NAAAEIALQATSRRLKGLDQDLDDIQTKEFARLAELESSALKIAYRIERLEWQTRMP 540
Db 481 NAAAEIALQATSRRLKGLDQDLDDIQTKEFARLAELESSALKIAYRIERLEWQTRMP 540
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Db 541 MPEDLAEDDEGEPEEGTSKDEGRASQEGPPGE 575

RESULT 3

US-10-207-951-2
; Sequence 2, Application US/10207951
; Publication No. US20030013156A1
; GENERAL INFORMATION:
; APPLICANT: Karl GUEGLER et al.
; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS
; FILE REFERENCE: C100063CON
; CURRENT APPLICATION NUMBER: US/10/207,951
; CURRENT FILING DATE: 2002-07-31
; PRIOR APPLICATION NUMBER: 09/735,932
; PRIOR FILING DATE: 2000-12-14
; PRIOR APPLICATION NUMBER: 60/211,223
; PRIOR FILING DATE: 2000-06-13
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 575
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-207-951-2

Query Match 100.0%; Score 2989; DB 14; Length 575;
Best Local Similarity 100.0%; Pred. No. 2.8e-266;
Matches 575; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 61 LOHGLVAMLVLDYSDLLIYLLDMVVRFTGFLBEGILVVDKGRISSRVVRWSSFLLDA 120
QY 121 SLMPDYYVYVRLGPHPTPLRLNRFARAPRLFEAFRTETRTAYPAAPRIAKMLIYFVYI 180
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QY 181 HNSCLYFALSRYLGFGRDAMVYPPAPQGFERLRQVLYSFYSTLLITTVGDTPPAR 240
Db 181 HNSCLYFALSRYLGFGRDAMVYPPAPQGFERLRQVLYSFYSTLLITTVGDTPPAR 240
QY 241 EEEYLFMWGDFLLAVMGFATIMGSMSSVYNNMTADAAFYDPHALVKKYMLOHVNRLKE 300
Db 241 EEEYLFMWGDFLLAVMGFATIMGSMSSVYNNMTADAAFYDPHALVKKYMLOHVNRLKE 300
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Qy 361 VLKLOPOTYSPGEYVCRKDGIGQEMYIIREGQAVVADGITOYAVLAGLTFGEISTIN 420
Db 361 VLKLOPOTYSPGEYVCRKDGIGQEMYIIREGQAVVADGITOYAVLAGLTFGEISTIN 420
Qy 421 IKGNNSGNRRRTANIKSLGYSDLPCLSKEDLREVLSYPOAQTIMEKREIILLKXNKLDV 480
Db 421 IKGNNSGNRRRTANIKSLGYSDLPCLSKEDLREVLSYPOAQTIMEKREIILLKXNKLDV 480
Qy 481 NAEAEIALQEAATESRLKGLDQDLDTQKFAILLAELESSALKIAYRIERLEWOTREMP 540
Db 481 NAEAEIALQEAATESRLKGLDQDLDTQKFAILLAELESSALKIAYRIERLEWOTREMP 540
Qy 541 MPEDLAEDDEGEPEEGTSKDEGRASQEGPPGPE 575
Db 541 MPEDLAEDDEGEPEEGTSKDEGRASQEGPPGPE 575
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RESULT 4

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US-09-842-758-30
; Sequence 30, Application US/09842758
; Publication No. US20030083244A1
; GENERAL INFORMATION:
; APPLICANT: Vernet, Corine A. M.
; APPLICANT: Fernandes, Elma R.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Shinkels, Richard A.
; APPLICANT: Malyankar, Uriel M.
; APPLICANT: Boldog, Ferenc L.
; APPLICANT: Zernusen, Bryan D.
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Majumder, Kumud
; APPLICANT: Tchernen, Velizar T.
; APPLICANT: Padigarau, Muralidhara
; APPLICANT: Patuturajan, Meera
; APPLICANT: Burgess, Catherine E.
; APPLICANT: Gangoli, Bsha A.
; APPLICANT: Smithson, Glennda
; APPLICANT: Rastelli, Luca
; APPLICANT: MacDougall, John R.
; APPLICANT: Taupler, Raymond J.
; APPLICANT: Grose, William M.
; APPLICANT: Edward, Szekeres S.
; APPLICANT: Alsobrook II, John P.
; TITLE OF INVENTION: No. US20030083244A1el Proteins and Nucleic Acids Encoding Same
; FILE REFERENCE: 1596-783
; CURRENT APPLICATION NUMBER: US/09/842,758
; PRIOR FILING DATE: 2001-04-25
; PRIOR APPLICATION NUMBER: 60/200,158
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/200,613
; PRIOR FILING DATE: 2000-04-28
; PRIOR APPLICATION NUMBER: 60/200,780
; PRIOR FILING DATE: 2000-04-28
; PRIOR APPLICATION NUMBER: 60/201,006
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/201,007
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/201,236
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/201,238
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/201,186
; PRIOR FILING DATE: 2000-05-02
; PRIOR APPLICATION NUMBER: 60/201,474
; PRIOR FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: 60/201,508
; PRIOR FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: 60/220,591
; PRIOR FILING DATE: 2000-07-25
; PRIOR APPLICATION NUMBER: 60/232,678
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; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: 60/263,217
; PRIOR FILING DATE: 2001-01-22
; PRIOR APPLICATION NUMBER: 60/265,160
; PRIOR FILING DATE: 2001-01-30
; NUMBER OF SEQ ID NOS: 113
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 30
; LENGTH: 575
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-842-758-30
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Query Match 99.8%; Score 2984; DB 10; Length 575;
Best Local Similarity 99.8%; Pred No. 8.2e-266;
Matches 574; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Db 1 MSQDTKVYTTSSPPAPSKARKLPLVLDPSGDYYVWMTNWFPMYNIILVCRACFPD 60
Qy 61 LOHGIVAMVLVDYTSDDLILYLDVYVRHTGFLBEGIIVDKGRISRYRTWSFFLDA 120
Db 61 LOHGIVAMVLVDYTSDDLILYLDVYVRHTGFLBEGIIVDKGRISRYRTWSFFLDA 120
Qy 121 SLMPDVVYVYLGPHPTPLRLNRLRAPRLFEAPRTEPTRAYPNAPRIAKIMLYIFYI 180
Db 121 SLMPDVVYVYLGPHPTPLRLNRLRAPRLFEAPRTEPTRAYPNAPRIAKIMLYIFYI 180
Qy 181 HWSCLYPALSRVYJGFGSDAWVPDPAQGFERLRQVLYSFYSTLLITLVGDTPPPAR 240
Db 181 HWSCLYPALSRVYJGFGSDAWVPDPAQGFERLRQVLYSFYSTLLITLVGDTPPPAR 240
Qy 241 EEEYLFMGDPLLVAGATITGSMSSVITYMMNTDAAFPYDHALVKKYMKI QHNRKLE 300
Db 241 EEEYLFMGDPLLVAGATITGSMSSVITYMMNTDAAFPYDHALVKKYMKI QHNRKLE 300
Qy 301 RVIDWYOHLOINKKMTNEVALIOHLPERLRAEVAVSHLSTLSVQIFONCEASLLEBL 360
Db 301 RVIDWYOHLOINKKMTNEVALIOHLPERLRAEVAVSHLSTLSVQIFONCEASLLEBL 360
Qy 361 VLKLOPOTYSPGEYVCRKDGIGQEMYIIREGQAVVADGITOYAVLAGLTFGEISTIN 420
Db 361 VLKLOPOTYSPGEYVCRKDGIGQEMYIIREGQAVVADGITOYAVLAGLTFGEISTIN 420
Qy 421 IKGNNSGNRRRTANIKSLGYSDLPCLSKEDLREVLSYPOAQTIMEKREIILLKXNKLDV 480
Db 421 IKGNNSGNRRRTANIKSLGYSDLPCLSKEDLREVLSYPOAQTIMEKREIILLKXNKLDV 480
Qy 481 NAEAEIALQEAATESRLKGLDQDLDTQKFAILLAELESSALKIAYRIERLEWOTREMP 540
Db 481 NAEAEIALQEAATESRLKGLDQDLDTQKFAILLAELESSALKIAYRIERLEWOTREMP 540
Qy 541 MPEDLAEDDEGEPEEGTSKDEGRASQEGPPGPE 575
Db 541 MPEDLAEDDEGEPEEGTSKDEGRASQEGPPGPE 575
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RESULT 5

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US-10-174-333-30
; Sequence 30, Application US/10174333
; Publication No. US20040029220A1
; GENERAL INFORMATION:
; APPLICANT: Vernet, Corine A. M.
; APPLICANT: Fernandes, Elma R.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Malyankar, Uriel M.
; APPLICANT: Boldog, Ferenc L.
; APPLICANT: Zernusen, Bryan D.
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Majumder, Kumud
; APPLICANT: Tchernen, Velizar T.
; APPLICANT: Padigarau, Muralidhara
```


QY 361 VKLQPOQYTSPEEYVCRKKGDIQEMYYIIRGQLAVVADGITOYAVLGAGLYFGEISIIIN 420
Db 361 VKLQPOQYTSPEEYVCRKKGDIQEMYYIIRGQLAVVADGITOYAVLGAGLYFGEISIIIN 420
QY 421 IKGNMSGNRKRNANIKSLGYSDFCLSKEDLREVSEYPOAQTIMKEKREIILKNKKLDV 480
Db 421 IKGNMSGNRKRNANIKSLGYSDFCLSKEDLREVSEYPOAQTIMKEKREIILKNKKLDV 480
QY 481 NAEAAEIALQEATSRRLKGLDQDLQTKFARLLAELESSALKIAYRIERLEWQTRRMP 540
Db 481 NAEAAEIALQEATSRRLKGLDQDLQTKFARLLAELESSALKIAYRIERLEWQTRRMP 540
QY 541 MPEDLAEDDEGEPEEGTSKDEGRASQEGPPGPE 575
Db 541 MPEDLAEDDEGEPEEGTSKDEGRASQEGPPGPE 575

RESULT 7
US-09-842-758-28
; Sequence 28, Application US/09842758
; Publication No. US20030083244A1
; GENERAL INFORMATION:
; APPLICANT: Vernet, Corine A. M.
; APPLICANT: Fernandes, Elma R.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Shimkets, Richard A.
; APPLICANT: Malyankar, Uriel M.
; APPLICANT: Boldog, Ferenc L.
; APPLICANT: Zernhusen, Bryan D.
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Majumder, Kumud
; APPLICANT: Tchernev, Velizar T.
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Paturajan, Meera
; APPLICANT: Burgess, Catherine E.
; APPLICANT: Gangoli, Esna A.
; APPLICANT: Smithson, Glennda
; APPLICANT: MacDougall, John R.
; APPLICANT: Taupier, Raymond J.
; APPLICANT: Grose, William M.
; APPLICANT: Edward, Szekeres S.
; APPLICANT: Alsobrook II, John P
; TITLE OF INVENTION: No. US20030083244A1 Proteins and Nucleic Acids Encoding Same
; FILE REFERENCE: 15966-783
; CURRENT APPLICATION NUMBER: US/09/842,758
; CURRENT FILING DATE: 2001-04-25
; PRIOR APPLICATION NUMBER: 60/200,158
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/200,613
; PRIOR FILING DATE: 2000-04-28
; PRIOR APPLICATION NUMBER: 60/200,780
; PRIOR FILING DATE: 2000-04-28
; PRIOR APPLICATION NUMBER: 60/201,006
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/201,007
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/201,236
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/201,238
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/201,186
; PRIOR FILING DATE: 2000-05-02
; PRIOR APPLICATION NUMBER: 60/201,474
; PRIOR FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: 60/201,508
; PRIOR FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: 60/220,591
; PRIOR FILING DATE: 2000-07-25
; PRIOR APPLICATION NUMBER: 60/232,678
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: 60/263,217

; PRIOR FILING DATE: 2001-01-22
; PRIOR APPLICATION NUMBER: 60/265,160
; PRIOR FILING DATE: 2001-01-30
; NUMBER OF SEQ ID NOS: 113
; SOFTWARE: Patencin Ver. 2.1
; SEQ ID NO 28
; LENGTH: 578
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-842-758-28

Query Match 98.9%; Score 2957.5; DB 10; Length 578;
Best Local Similarity 99.5%; Pred. No. 2.3e-263;
Matches 575; Conservative 0; Mismatches 0; Indels 3; Gaps 3;

QY 1 MSQPKVKTSSPPAPSKA-RKLLPVLDPSGDYYWMLNMFVVMYNNLIIVGRACFP 59
Db 1 MSQPKVKTSSPPAPSKARKKLLEVLDPGDIYYWMLNMFVVMYNNLIIVGRACFP 60
QY 60 DLQHGIVAVMLVLDYTSLLYLIDMVFVFEHT-GFLEQGIIVVDKGRISRYVRTWSFFLD 118
Db 61 DLQHGIVAVMLVLDYTSLLYLIDMVFVFEHTGFGFLEQGIIVVDKGRISRYVRTWSFFLD 120
QY 119 LASLMPDVVYVRLGPHPTTLRLNRFAPRLFEAFDRTETRTAVPNAFRIAKMLYIFV 178
Db 121 LASLMPDVVYVRLGPHPTTLRLNRFAPRLFEAFDRTETRTAVPNAFRIAKMLYIFV 180
QY 179 VIHNSCLYFALSRVIGFGRNAVYPDPAQGFPERLRQYLYSFFSTLIILTTVGDTPP 238
Db 181 VIHNSCLYFALSRVIGFGRNAVYPDPAQGFPERLRQYLYSFFSTLIILTTVGDTPP 240
QY 239 ARSEYFLPMVDFFLAVWGFATIMGSMSSVLYNMNTADAAVYPDHALVKYMKLOHVRK 298
Db 241 ARSEYFLPMVDFFLAVWGFATIMGSMSSVLYNMNTADAAVYPDHALVKYMKLOHVRK 300
QY 299 LERRVIDWYQHLQINKKNTNEVALIQLPERLRAEVAVSVHSLSTLSRVQIFQNCBASLLE 358
Db 301 LERRVIDWYQHLQINKKNTNEVALIQLPERLRAEVAVSVHSLSTLSRVQIFQNCBASLLE 360
QY 359 ELVILKQPOQYTSPEEYVCRKKGDIQEMYYIIRGQLAVVADGITOYAVLGAGLYFGEISI 418
Db 361 ELVILKQPOQYTSPEEYVCRKKGDIQEMYYIIRGQLAVVADGITOYAVLGAGLYFGEISI 420
QY 419 INIK-GNMSGNRKRNANIKSLGYSDFCLSKEDLREVSEYPOAQTIMKEKREIILKNKK 477
Db 421 INIKGNMSGNRKRNANIKSLGYSDFCLSKEDLREVSEYPOAQTIMKEKREIILKNKK 480
QY 478 LDVNAEAAEIALQEATSRRLKGLDQDLQTKFARLLAELESSALKIAYRIERLEWQTR 537
Db 481 LDVNAEAAEIALQEATSRRLKGLDQDLQTKFARLLAELESSALKIAYRIERLEWQTR 540
QY 538 EMPMEDLAEDDEGEPEEGTSKDEGRASQEGPPGPE 575
Db 541 EMPMEDLAEDDEGEPEEGTSKDEGRASQEGPPGPE 578

RESULT 8
US-10-174-333-28
; Sequence 28, Application US/10174333
; Publication No. US20040029220A1
; GENERAL INFORMATION:
; APPLICANT: Vernet, Corine A. M.
; APPLICANT: Fernandes, Elma R.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Malyankar, Uriel M.
; APPLICANT: Boldog, Ferenc L.
; APPLICANT: Zernhusen, Bryan D.
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Majumder, Kumud
; APPLICANT: Tchernev, Velizar T.
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Paturajan, Meera
; APPLICANT: Burgess, Catherine E.

QY 481 NAAEALALQATSRRLKGLDQDLDTOTKFAILLAELESSALKIAYRIERLEWOTRMP 540
 DB 481 NAAEALALQATSRRLKGLDQDLDTOTKFAILLAELESSALKIAYRIERLEWOTRMP 540
 QY 541 MPEDLAEADDEGEPEEGTSGKDEGRASQEGPPPE 575
 DB 541 MPEDMGADDEAEPEEGTSGKDEGRASQAGPSCIE 575

RESULT 10

US-09-927-267-16
 ; Sequence 16, Application US/09927267
 ; Publication No. US20020182691A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Creech, Christopher D.
 ; APPLICANT: ICGen, Inc.
 ; APPLICANT: Jega, Timothy J.
 ; TITLE OF INVENTION: Channel A No. US20020182691A1 Human Cyclic Nucleotide-Gated Ion
 ; FILE REFERENCE: 018512-006510US
 ; CURRENT APPLICATION NUMBER: US/09/927,267
 ; PRIOR FILING DATE: 2001-08-10
 ; PRIOR APPLICATION NUMBER: US 60/226,253
 ; NUMBER OF SEQ ID NOS: 16
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 16
 ; LENGTH: 575
 ; TYPE: PRT
 ; ORGANISM: Rattus norvegicus
 ; FEATURE:
 ; OTHER INFORMATION: rat cyclic nucleotide gated cation channel cONC2
 US-09-927-267-16

Query Match 94.0%; Score 2811; DB 9; Length 575;
 Best Local Similarity 93.4%; Pred. No. 7.3e-250;
 Matches 537; Conservative 16; Mismatches 22; Indels 0; Gaps 0;

QY 1 MSODTVKTTESPPAPSKARKLLPYLDPSGDYVYMLNTPVWNLIIIVCRACFPD 60
 DB 1 MSODGVKTTESPPAPSKARKLLPYLDPSGDYVYMLNTPVWNLIIIVCRACFPD 60
 QY 61 LQHYVAVMLVDYSDLLYLDMVYRFTGFEQGIIVVDKRISSRYRTWSPFLDIA 120
 DB 61 LQHSYVAVMLVDYSDLLYLDMVYRFTGFEQGIIVVDKRISSRYRTWSPFLDIA 120
 QY 121 SLMPDVVYVRLGPHTPTLRNLKFLAPLFEAFDETRTAYPNAFRILAKMLYFVYI 180
 DB 121 SLVPTDAAYVQGPHTPTLRNLKFLAPLFEAFDETRTAYPNAFRILAKMLYFVYI 180
 QY 181 HNNSCLYFALSKRYLGFGRDAMYPPDAPGPFERLRQYLYSFYFTLLITTVGDTPPPAR 240
 DB 181 HNNSCLYFALSKRYLGFGRDAMYPPDAPGPFERLRQYLYSFYFTLLITTVGDTPPPAR 240
 QY 241 EEEYFPMVGDFLLAVGFTIWSMSVYNNMTADAAYPDHALYKTKMLQHYNRKLE 300
 DB 241 EEEYFPMVGDFLLAVGFTIWSMSVYNNMTADAAYPDHALYKTKMLQHYNRKLE 300
 QY 301 RRVIDWYQHLQINKKQTNVAILQHLPERLAEVAVSYHLSTLSVVOIFONCEASLLEL 360
 DB 301 RRVIDWYQHLQINKKQTNVAILQHLPERLAEVAVSYHLSTLSVVOIFONCEASLLEL 360
 QY 361 VLKIQPQYYSRGEYCRKGDIGQENYIIRREGGLAVVADGDTQYAVLGAAGLYFGSISIN 420
 DB 361 VLKIQPQYYSRGEYCRKGDIGQENYIIRREGGLAVVADGDTQYAVLGAAGLYFGSISIN 420
 QY 421 IKGNMGRRTANIKSLGYSDPLFCLSKEDLREYSEYQAOQIMEKREIILKNKLDV 480
 DB 421 IKGNMGRRTANIKSLGYSDPLFCLSKEDLREYSEYQAOQIMEKREIILKNKLDV 480
 QY 481 NAAEALALQATSRRLKGLDQDLDTOTKFAILLAELESSALKIAYRIERLEWOTRMP 540
 DB 481 NAAEALALQATSRRLKGLDQDLDTOTKFAILLAELESSALKIAYRIERLEWOTRMP 540

QY 541 MPEDLAEADDEGEPEEGTSGKDEGRASQEGPPPE 575
 DB 541 MPEDMGADDEAEPEEGTSGKDEGRASQAGPSCIE 575

RESULT 11

US-09-842-758-74
 ; Sequence 74, Application US/09842758
 ; Publication No. US20030083244A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Vernet, Corine A. M.
 ; APPLICANT: Fernandes, Elma R.
 ; APPLICANT: Gerlach, Valerie
 ; APPLICANT: Shimkets, Richard A
 ; APPLICANT: Malyankar, Uriel M
 ; APPLICANT: Boldog, Ferenc L
 ; APPLICANT: zerhusen, Bryan D
 ; APPLICANT: Spytek, Kimberly A
 ; APPLICANT: Majumder, Kumud
 ; APPLICANT: Tchenerov, Velizar T
 ; APPLICANT: Padigaru, Muraidhara
 ; APPLICANT: Patturajan, Meera
 ; APPLICANT: Burgess, Catherine E
 ; APPLICANT: Gangolli, Esna A
 ; APPLICANT: Smithson, Glenda
 ; APPLICANT: Rastelli, Luca
 ; APPLICANT: MacDougall, John R
 ; APPLICANT: Taupier, Raymond J
 ; APPLICANT: Grose, William M
 ; APPLICANT: Edward, Szekeres S
 ; APPLICANT: Alsobrook II, John P
 ; TITLE OF INVENTION: No. US20030083244A1el Proteins and Nucleic Acids Encoding Same
 ; FILE REFERENCE: 15966-783
 ; CURRENT APPLICATION NUMBER: US/09/842,758
 ; PRIOR FILING DATE: 2001-04-25
 ; PRIOR APPLICATION NUMBER: 60/200,158
 ; PRIOR FILING DATE: 2000-04-26
 ; PRIOR APPLICATION NUMBER: 60/200,613
 ; PRIOR FILING DATE: 2000-04-28
 ; PRIOR APPLICATION NUMBER: 60/200,780
 ; PRIOR FILING DATE: 2000-04-28
 ; PRIOR APPLICATION NUMBER: 60/201,006
 ; PRIOR FILING DATE: 2000-05-01
 ; PRIOR APPLICATION NUMBER: 60/201,007
 ; PRIOR FILING DATE: 2000-05-01
 ; PRIOR APPLICATION NUMBER: 60/201,236
 ; PRIOR FILING DATE: 2000-05-01
 ; PRIOR APPLICATION NUMBER: 60/201,238
 ; PRIOR FILING DATE: 2000-05-01
 ; PRIOR APPLICATION NUMBER: 60/201,186
 ; PRIOR FILING DATE: 2000-05-02
 ; PRIOR APPLICATION NUMBER: 60/201,474
 ; PRIOR FILING DATE: 2000-05-03
 ; PRIOR APPLICATION NUMBER: 60/201,508
 ; PRIOR FILING DATE: 2000-05-03
 ; PRIOR APPLICATION NUMBER: 60/220,591
 ; PRIOR FILING DATE: 2000-07-25
 ; PRIOR APPLICATION NUMBER: 60/232,678
 ; PRIOR FILING DATE: 2000-09-15
 ; PRIOR APPLICATION NUMBER: 60/263,217
 ; PRIOR FILING DATE: 2001-01-22
 ; PRIOR APPLICATION NUMBER: 60/265,160
 ; PRIOR FILING DATE: 2001-01-30
 ; NUMBER OF SEQ ID NOS: 113
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 74
 ; LENGTH: 575
 ; TYPE: PRT
 ; ORGANISM: Rattus norvegicus
 ; OTHER INFORMATION: Rattus norvegicus

Query Match 94.0%; Score 2811; DB 10; Length 575;

Best Local Similarity 93.4%; Pred. No. 7.3e-250;
Matches 537; Conservative 16; Mismatches 22; Indels 0; Gaps 0;

QY 1 MSODTKVTTSSPPAPSKARLPLVLPSPGDIYYMMNTMVPVYMLIIVCRACFPD 60
Db 1 MSODKVKTTSTPPAPTKARKMLPVLDPSSGDIYYMMNTMVPVYMLIIVCRACFPD 60
QY 61 LQHGVLAVMLVDYSDLLYLDDMYVRFHTGFLQGIIVVDKGRISRYVRTWSEFLDIA 120
Db 61 LQHSVLAVMFLVDYSDLLYLDDIGRFHTGFLQGIIVVDKGRISRYVRTWSEFLDIA 120
QY 121 SIMPTDVVYVRLGPHPTPLRLNRLPRLPFAFDRTEFTRAYPAFRITAKMLYIFVVI 180
Db 121 SLVPTDAAYVQLGPHPTPLRLNRLPRLPFAFDRTEFTRAYPAFRITAKMLYIFVVI 180
QY 181 HNSCLYFALSRYLGFGRDAMVYPPDPAOGFERLRQYLSFYFSTLITTVGDTPLPDR 240
Db 181 HNSCLYFALSRYLGFGRDAMVYPPDPAOGFERLRQYLSFYFSTLITTVGDTPLPDR 240
QY 241 EEEYLFMWGDFLLAVMGFATIMGSMSSVLYNMNTADAFYPDHALVKYMKLOHVNRKLE 300
Db 241 EEEYLFMWGDFLLAVMGFATIMGSMSSVLYNMNTADAFYPDHALVKYMKLOHVNRKLE 300
QY 301 RRVYDWYOHQIINKKMTNEVALIQLHPLRLRAEVAVSVHLSTLSRVQIFONCEASLLEEL 360
Db 301 RRVYDWYOHQIINKKMTNEVALIQLHPLRLRAEVAVSVHLSTLSRVQIFONCEASLLEEL 360
QY 361 VLKLOPQYSPGDIYVCRKDIQOEMYLIREGQLAVVADGDTQYAVLGAAGYGEISLIIN 420
Db 361 VLKLOPQYSPGDIYVCRKDIQOEMYLIREGQLAVVADGDTQYAVLGAAGYGEISLIIN 420
QY 421 IKGNMGNRRRTANIKSLGYSDLFCLSKEDLREVLSEYQAOQTMEKREILIKKMKLDV 480
Db 421 IKGNMGNRRRTANIKSLGYSDLFCLSKEDLREVLSEYQAOQTMEKREILIKKMKLDV 480
QY 481 NAEAEIALOEATESRLRGIDQDLDTQTFARLAELESSALKIAYRIERLEMOQREMP 540
Db 481 NAEAEIALOEATESRLRGIDQDLDTQTFARLAELESSALKIAYRIERLEMOQREMP 540
QY 541 MPEDIAEADGEPEEGTSGKDEGRASQSGPPE 575
Db 541 MPEDMGEADGEPEEGTSGKDEGRASQSGPPE 575

RESULT 12
US-10-174-333-74
Sequence 74, Application US/10174333
Publication No. US20040029220A1

GENERAL INFORMATION:
APPLICANT: Vernet, Corine A.M.
APPLICANT: Fernandes, Elma R.
APPLICANT: Gerlach, Valerie
APPLICANT: Malyankar, Uriel M.
APPLICANT: Boldog, Ferenc L.
APPLICANT: Zethusen, Bryan D.
APPLICANT: Spytek, Kimberly A.
APPLICANT: Majumder, Kundu
APPLICANT: Tchernev, Velizar T.
APPLICANT: Padigaru, Muralidhara
APPLICANT: Patturajan, Meera
APPLICANT: Burgess, Catherine E.
APPLICANT: Gangoli, Esha A.
APPLICANT: Smithson, Glenda
APPLICANT: Rastelli, Luca
APPLICANT: MacDougall, John R.
APPLICANT: Taubier, Raymond J.
APPLICANT: Grosse, William M.
APPLICANT: Szekeres, Edward S.
APPLICANT: Alsobrook, John P.
APPLICANT: Anderson, David W.
APPLICANT: Guo, Xiaojia (Sasha)
APPLICANT: Li, Li
APPLICANT: Zhong, Mei

TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
FILE REFERENCE: 15966-783 CIP1
CURRENT APPLICATION NUMBER: US/10/174,333

PRIOR FILING DATE: 2002-06-18
PRIOR APPLICATION NUMBER: 60/193,664
PRIOR FILING DATE: 2000-03-31
PRIOR APPLICATION NUMBER: 60/194,614
PRIOR FILING DATE: 2000-04-05
PRIOR APPLICATION NUMBER: 60/195,063
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,066
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,067
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,068
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,069
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,070
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,510
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/219,855
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: 60/219,855
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 186
SOFTWARE: CuroSegList version 0.1
SEQ ID NO 74
LENGTH: 575
TYPE: PRT
ORGANISM: Rattus norvegicus
US-10-174-333-74

Query Match 94.0%; Score 2811; DB 12; Length 575;
Best Local Similarity 93.4%; Pred. No. 7.3e-250;
Matches 537; Conservative 16; Mismatches 22; Indels 0; Gaps 0;

QY 1 MSODTKVTTSSPPAPSKARLPLVLPSPGDIYYMMNTMVPVYMLIIVCRACFPD 60
Db 1 MSODKVKTTSTPPAPTKARKMLPVLDPSSGDIYYMMNTMVPVYMLIIVCRACFPD 60
QY 61 LQHGVLAVMLVDYSDLLYLDDMYVRFHTGFLQGIIVVDKGRISRYVRTWSEFLDIA 120
Db 61 LQHSVLAVMFLVDYSDLLYLDDIGRFHTGFLQGIIVVDKGRISRYVRTWSEFLDIA 120
QY 121 SIMPTDVVYVRLGPHPTPLRLNRLPRLPFAFDRTEFTRAYPAFRITAKMLYIFVVI 180
Db 121 SLVPTDAAYVQLGPHPTPLRLNRLPRLPFAFDRTEFTRAYPAFRITAKMLYIFVVI 180
QY 181 HNSCLYFALSRYLGFGRDAMVYPPDPAOGFERLRQYLSFYFSTLITTVGDTPLPDR 240
Db 181 HNSCLYFALSRYLGFGRDAMVYPPDPAOGFERLRQYLSFYFSTLITTVGDTPLPDR 240
QY 241 EEEYLFMWGDFLLAVMGFATIMGSMSSVLYNMNTADAFYPDHALVKYMKLOHVNRKLE 300
Db 241 EEEYLFMWGDFLLAVMGFATIMGSMSSVLYNMNTADAFYPDHALVKYMKLOHVNRKLE 300
QY 301 RRVYDWYOHQIINKKMTNEVALIQLHPLRLRAEVAVSVHLSTLSRVQIFONCEASLLEEL 360
Db 301 RRVYDWYOHQIINKKMTNEVALIQLHPLRLRAEVAVSVHLSTLSRVQIFONCEASLLEEL 360
QY 361 VLKLOPQYSPGDIYVCRKDIQOEMYLIREGQLAVVADGDTQYAVLGAAGYGEISLIIN 420
Db 361 VLKLOPQYSPGDIYVCRKDIQOEMYLIREGQLAVVADGDTQYAVLGAAGYGEISLIIN 420
QY 421 IKGNMGNRRRTANIKSLGYSDLFCLSKEDLREVLSEYQAOQTMEKREILIKKMKLDV 480
Db 421 IKGNMGNRRRTANIKSLGYSDLFCLSKEDLREVLSEYQAOQTMEKREILIKKMKLDV 480
QY 481 NAEAEIALOEATESRLRGIDQDLDTQTFARLAELESSALKIAYRIERLEMOQREMP 540
Db 481 NAEAEIALOEATESRLRGIDQDLDTQTFARLAELESSALKIAYRIERLEMOQREMP 540

QY 541 MPEDLAEDDGEPEEGTSKDEGRASQEGPPGPE 575
 Db 541 MPEDMGADDEAPEEGTSTKDEGRAGQAGPSGIE 575

RESULT 13

US-10-207-951-4
 ; Sequence 4, Application US/10207951
 ; Publication No. US20030013156A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Karl GUEGLER et al.
 ; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
 ; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS
 ; FILE REFERENCE: CLO00663CON
 ; CURRENT APPLICATION NUMBER: US/10/207,951
 ; PRIOR FILING DATE: 2002-07-31
 ; PRIOR APPLICATION NUMBER: 09/735,932
 ; PRIOR FILING DATE: 2000-12-14
 ; PRIOR APPLICATION NUMBER: 60/211,223
 ; NUMBER OF SEQ ID NOS: 25
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 4
 ; LENGTH: 1704
 ; TYPE: PRT
 ; ORGANISM: Rattus norvegicus
 US-10-207-951-4

Query Match 80.1%; Score 2394; DB 14; Length 1704;
 Best Local Similarity 37.1%; Pred. No. 1,1e-210;
 Matches 567; Conservative 5; Mismatches 3; Indels 952; Gaps 9;

QY 1 MSODTKYKTESPPAPSKARKLPLVDPGSDYYMMNTMVPFVMTLILVCRACPD 60
 Db 117 MSQCKKTTSTPAPKARKMLPLDPSGDYYMMNTMVPFVMTLILVCRACPD 176
 QY 61 -LQHGVLVAMVLVDYSDLLYLDMVVRFHGTGLEQGLVVDKGRISRYRTWSFFLDL 119
 Db 177 QLQHGVLVAMVLVDYSDLLYLDMVVRFHGTGLEQGLVVDKGRISRYRTWSFFLDL 236
 QY 120 A----- 120
 Db 237 ALQHYLVAMVLVDYSDLLYLDMVVRFHGTGLEQGLVVDKGRISRYRTWSFFLDL 296
 QY 121 -----SIMP 124
 Db 297 LVAMFVLVDYSDLLYLDMVVRFHGTGLEQGLVVDKGRISRYRTWSFFLDL 356
 QY 125 TDVVYVRLGPHPTPLRLNRLAPRLFEAPDRTETRTAYPNAFRIAKMLYIFVVI 180
 Db 357 TDVVYVRLGPHPTPLRLNRLAPRLFEAPDRTETRTAYPNAFRIAKMLYIFVVI 416
 QY 181 ----- 180
 Db 417 DYVLGPHPTPLRLNRLAPRLFEAPDRTETRTAYPNAFRIAKMLYIFVVISLVPDAA 476
 QY 181 -----HMNSCLYF 188
 Db 477 VOLGPHPTPLRLNRLAPRLFEAPDRTETRTAYPNAFRIAKMLYIFVVIQHMNSCLYF 536
 QY 189 ALSRYLGFGRDAMWYPPDPAQGFGERLRRQYLISFYFSTLILITTVGDTPPAR 240
 Db 537 ALSRYLGFGRDAMWYPPDPAQGFGERLRRQYLISFYFSTLILITTVGDTPPAR 596
 QY 241 ----- 240
 Db 597 ALSRYLGFGRDAMWYPPDPAQGFGERLRRQYLISFYFSTLILITTVGDTPPAR 656
 QY 241 -----EEEYLFMV 248
 Db 657 LSRYLGFGRDAMWYPPDPAQGFGERLRRQYLISFYFSTLILITTVGDTPLPDRQEEYLFMV 716

QY 249 GDFLLAVMGFATINGSMSVLYNNMTADAAFYPDHALVKYMKLQHVNRKLE----- 300
 Db 717 GDFLLAVMGFATINGSMSVLYNNMTADAAFYPDHALVKYMKLQHVNRKLEEEBYLFMV 776
 QY 301 ----- 300
 Db 777 GDFLLAVMGFATINGSMSVLYNNMTADAAFYPDHALVKYMKLQHVNLSEEEYLFMV 836
 QY 301 ----- 300
 Db 837 DFLAVMGFATINGSMSVLYNNMTADAAFYPDHALVKYMKLQHVNRKLEQREVIDYQ 896
 QY 301 ----- 300
 Db 897 HLQINKKMSNEVALIQLHPLERLRAEVAVSVHLSTLSRVQIFQNCBASLLELRRVIDYQ 956
 QY 301 -----RRVIDYQ 308
 Db 957 HLQINKKMSNEVALIQLHPLERLRAEVAVSVHLSTLSRVQIFQNCBASLLELRRVIDYQ 1016
 QY 309 HLQINKKMSNEVALIQLHPLERLRAEVAVSVHLSTLSRVQIFQNCBASLLEL-VLKLQPO 367
 Db 1017 HLQINKKMSNEVALIQLHPLERLRAEVAVSVHLSTLSRVQIFQNCBASLLELQVLKQPO 1076
 QY 368 TYPGEYVCRKGDIGQEMYYIIREGQLAVVADGDTQYAVLAGLYFGESITIN----- 420
 Db 1077 TYPGEYVCRKGDIGQEMYYIIREGQLAVVADGDTQYAVLAGLYFGESITINVLKQPO 1136
 QY 421 ----- 420
 Db 1137 TYPGEYVCRKGDIGQEMYYIIREGQLAVVADGDTQYAVLAGLYFGESITINVLKQPO 1196
 QY 421 ----- 420
 Db 1197 YSPGEYVCRKGDIGQEMYYIIREGQLAVVADGDTQYAVLAGLYFGESITINQKNGSG 1256
 QY 421 ----- 420
 Db 1257 NRRNTNKSIGYSDPLFCLSKEDLREVLSYFPOAQWEEKREITLTKMLDVISIKNGSG 1316
 QY 421 -----IKNGSGNR 430
 Db 1317 NRRNTNKSIGYSDPLFCLSKEDLREVLSYFPOAQWEEKREITLTKMLDVISIKNGSG 1376
 QY 431 TANIKSLGYSDPLFCLSKEDLREVLSYFPOAQWEEKREITLTKMLDVISIKNGSG 1489
 Db 1377 TANIKSLGYSDPLFCLSKEDLREVLSYFPOAQWEEKREITLTKMLDVISIKNGSG 1436
 QY 490 QEATESRLRGLDQDLDTQKFAFLAELSSALKIYRIERLEWQREMP----- 540
 Db 1437 QEATESRLRGLDQDLDTQKFAFLAELSSALKIYRIERLEWQREMPNAAEIAL 1496
 QY 541 ----- 540
 Db 1497 QEATESRLRGLDQDLDTQKFAFLAELSSALKIYRIERLEWQREMPNAAEIAL 1556
 QY 541 -----MPEDLAEA 548
 Db 1557 QEATESRLRGLDQDLDTQKFAFLAELSSALKIYRIERLEWQREMPNAAEIAL 1616
 QY 549 DDEGEPEEGTSKDEGRASQEGPPGPE 575
 Db 1617 DDEGEPEEGTSKDEGRASQEGPPGPE 1643

RESULT 14

US-10-029-677-16
 ; Sequence 16, Application US/10029677
 ; Publication No. US20030096249A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Westphal, Ryan S.
 ; APPLICANT: Feder, John N.
 ; APPLICANT: Ramanathan, Chandra S.

```

; APPLICANT: Mintier, Gabriel A.
; TITLE OR INVENTION: NUCLEIC ACID MOLECULES AND POLYPEPTIDES FOR A HUMAN CATION CHANNEL
; FILE OR INVENTION: POLYPEPTIDE
; FILE REFERENCE: D0187NP
; CURRENT APPLICATION NUMBER: US/10/029,677
; CURRENT FILING DATE: 2002-05-06
; PRIOR APPLICATION NUMBER: US 60/257,865
; PRIOR FILING DATE: 2000-12-21
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 16
; LENGTH: 663
; TYPE: PRT
; ORGANISM: Bos taurus
US-10-029-677-16

Query Match      52.5%; Score 1568; DB 14; Length 663;
Best Local Similarity 54.2%; Pred. No. 3.8e-135;
Matches 292; Conservative 108; Mismatches 133; Indels 6; Gaps 2;

QY 18 SKARKLLPVLDPGSDYYMMVNTWVFPVMYLLILVCRACFPDLOHGIVAMVLDYTS 77
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 124 TKKKFELFVLDPADQWYRMLFVJAMPVLYNMCILVARACFSDLOQRNYFVWVLDYFSD 183
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 78 LTVLLDMVVRFHGTGFEQGLLVVDKGRISRRYRTWSFFELDASLMPDYYVYVRLGHP 137
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 184 VVYIADLIIRLRTGFEQGLLVKDPCKLRNRYHTLQFCKLDVASIIPDLIFYFVGIHNP 243
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 138 TLRLNRLRAPRLFEADRTETRTAYPNAPRIAKMLYIFVVIHWSCLVFALSRYLGF 197
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 244 EVRNRLHFRARMEFPDRTRTSYPNIRISMLVILYILIHMACTIYVLSKSGFG 303
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 198 RDAWVYDPPAOPGFERLRQYLYSFYSTLILTTVGDTPPPARREBYLFVWGDPLAVMG 257
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 304 VDTWVYNNITDPEYGYLAREYICLYWSTLITIGTTPPVKDEBYLFVFDLIGVLI 363
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 258 FATMGSMSSVIYMMNTADAAPYFDHALVKKYMKLQHVNRKLERVVDWYQHLQINKMT 317
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 364 FATVGVGSMISNMNATRAEFQAKIDAVGHYQFRRVSKMEAKVIRWFDYLTNKKSV 423
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 318 NEVALIOLPERLRAEVAVSVHLSLSRVQIFONCEASILEELVCLKOPQTSFGYVCR 377
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 424 DERIVLKNLPKLAELAINVHLSLTKKVRIFQDCEAGLVELVCLKRPQVFGDYICR 483
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 378 KGDIGQEMYYIIRREGQLAVVADGITOYAVLAGLYPGEISILINIKMGSGRRRTANIKSL 437
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 484 KGDIGKEMYYIIRKEGLAVVADGTOYALLSAGSCFGEISILINIKMGSGRRRTANIRSL 543
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 438 GYSDFCLSKEDLEEVSEYPOACTIMEKGRITLLKNNKLDVNAEAA--EIALQEATES 495
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 544 GYSDFCLSKDIMEAVEYEDAKVLEERGREILMKGLIDENBVAASMEVDVQE---- 599
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 496 RLRLGDOOLDLQTKFARLLAELESSALKIAYRIERLEMOTREMPMPEDLAADDEGP 554
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 600 KLEQLETMTDLYTRFARLLAEYGAQOKLKORITVLETMKQNNEDDLSLSDGMSPEP 658
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 15
US-10-295-573-5
; Sequence 5, Application US/10295573
; Publication No. US20030157571A1
; GENERAL INFORMATION:
; APPLICANT: Rich, Jeffrey W.
; APPLICANT: Karpen, Jeffrey W.
; APPLICANT: Cooper, Jerome
; APPLICANT: Schaeck, Jerome
; TITLE OF INVENTION: MODIFIED CYCLIC NUCLEOTIDE GATED ION CHANNELS
; FILE REFERENCE: UNC-07536
; CURRENT APPLICATION NUMBER: US/10/295,573
; PRIOR FILING DATE: 2002-11-15
; PRIOR APPLICATION NUMBER: 60/332,494
; PRIOR FILING DATE: 2001-11-16
; NUMBER OF SEQ ID NOS: 8

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; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 664
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-10-295-573-5

Query Match      52.4%; Score 1565; DB 14; Length 664;
Best Local Similarity 54.4%; Pred. No. 7.2e-135;
Matches 293; Conservative 106; Mismatches 134; Indels 6; Gaps 2;

QY 18 SKARKLLPVLDPGSDYYMMVNTWVFPVMYLLILVCRACFPDLOHGIVAMVLDYTS 77
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 126 TKKKFELFVLDPADQWYRMLFVJAMPVLYNMCILVARACFSDLOQRNYFVWVLDYFSD 185
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QY 78 LTVLLDMVVRFHGTGFEQGLLVVDKGRISRRYRTWSFFELDASLMPDYYVYVRLGHP 137
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 186 TVYIADLIIRLRTGFEQGLLVKDPCKLRNRYHTLQFCKLDVASIIPDLIFYFVGIHNP 245
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 138 TLRLNRLRAPRLFEADRTETRTAYPNAPRIAKMLYIFVVIHWSCLVFALSRYLGF 197
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 246 EVRNRLHFRARMEFPDRTRTSYPNIRISMLVILYILIHMACTIYVLSKSGFG 305
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 198 RDAWVYDPPAOPGFERLRQYLYSFYSTLILTTVGDTPPPARREBYLFVWGDPLAVMG 257
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 306 VDTWVYNNITDPEYGYLAREYICLYWSTLITIGTTPPVKDEBYLFVFDLIGVLI 365
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 258 FATMGSMSSVIYMMNTADAAPYFDHALVKKYMKLQHVNRKLERVVDWYQHLQINKMT 317
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 366 FATVGVGSMISNMNATRAEFQAKIDAVGHYQFRRVSKMEAKVIRWFDYLTNKKTV 425
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 318 NEVALIOLPERLRAEVAVSVHLSLSRVQIFONCEASILEELVCLKOPQTSFGYVCR 377
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 426 DERIVLKNLPKLAELAINVHLSLTKKVRIFQDCEAGLVELVCLKRPQVFGDYICR 485
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 378 KGDIGQEMYYIIRREGQLAVVADGITOYAVLAGLYPGEISILINIKMGSGRRRTANIKSL 437
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 486 KGDIGKEMYYIIRKEGLAVVADGTOYALLSAGSCFGEISILINIKMGSGRRRTANIRSL 545
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 438 GYSDFCLSKEDLEEVSEYPOACTIMEKGRITLLKNNKLDVNAEAA--EIALQEATES 495
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 546 GYSDFCLSKDIMEAVEYEDAKVLEERGREILMKGLIDENBVAASMEVDVQE---- 601
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 496 RLRLGDOOLDLQTKFARLLAELESSALKIAYRIERLEMOTREMPMPEDLAADDEGP 554
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 602 KLEQLETMTDLYTRFARLLAEYGAQOKLKORITVLETMKQNNEDDLSLSDGINTPEP 660
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Search completed: September 11, 2004, 01:49:05
Job time : 455 secs

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GenCore version 5.1.6
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OM nucleic - nucleic search, using SW model

Run on: September 10, 2004, 20:16:54 ; Search time 803.203 Seconds
(without alignments)
10824.747 Million cell updates/sec

Title: US-09-927-267-3

Perfect score: 1728

Sequence: 1 atgagccaggacacaaatf.....gacccccaggtccagagtga 1728

Scoring table: IDENTITY NUC
Gapop 10.0, Gapext 1.0

Searched: 3304383 seqs, 2515761380 residues 6608766

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: Published Applications NA:
1: /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
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6: /cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
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11: /cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*
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14: /cgn2_6/ptodata/2/pubpna/US10_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/US10_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/US10_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/US10_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1728	100.0	1728	9	US-09-927-267-3
2	1728	100.0	1728	16	US-10-189-507-2
3	1728	100.0	2308	9	US-09-927-267-2
4	1728	100.0	2366	13	US-10-302-172-351
5	1726.4	99.9	2051	17	US-10-311-624-2
6	1726.4	99.9	2551	10	US-09-842-758-29
7	1726.4	99.9	2551	13	US-10-174-333-29
8	1721.6	99.6	1758	9	US-09-735-932-1
9	1721.6	99.6	1758	15	US-10-207-951-1
10	1687.4	97.7	1835	13	US-09-842-758-27
11	1687.4	97.7	1835	10	US-10-174-333-27
12	652.6	37.8	10989	9	US-09-735-932-3
13	652.6	37.8	10989	15	US-10-207-951-3
14	588.2	34.0	2085	15	US-10-345-680-27

15	588.2	34.0	3486	15	US-10-345-680-25	Sequence 25, Appl
16	580.2	33.6	1995	9	US-09-735-927-1	Sequence 1, Appl
17	580.2	33.6	1995	16	US-10-189-507-4	Sequence 4, Appl
18	578.6	33.5	1995	14	US-10-034-843-1	Sequence 1, Appl
19	578.6	33.5	1995	15	US-10-168-651-34	Sequence 34, Appl
20	578.6	33.5	1995	16	US-10-189-507-1	Sequence 1, Appl
21	578.6	33.5	2111	15	US-10-114-153-17	Sequence 17, Appl
22	578.6	33.5	2190	15	US-10-029-677-23	Sequence 23, Appl
23	577	33.4	2186	15	US-10-029-677-1	Sequence 1, Appl
24	534.8	30.9	3027	15	US-10-295-573-1	Sequence 1, Appl
25	533.2	30.9	1995	15	US-10-087-217-5	Sequence 5, Appl
26	533.2	30.9	3027	15	US-10-295-573-2	Sequence 2, Appl
27	530	30.7	1995	15	US-10-087-217-1	Sequence 1, Appl
28	530	30.7	1995	15	US-10-087-217-7	Sequence 7, Appl
29	530	30.7	3027	15	US-10-295-573-4	Sequence 4, Appl
30	526.8	30.5	1995	15	US-10-087-217-3	Sequence 3, Appl
31	514.2	29.8	2877	15	US-10-295-573-3	Sequence 3, Appl
32	498.6	28.9	12017	9	US-09-735-927-3	Sequence 3, Appl
33	452.4	26.2	2500	13	US-10-342-887-427	Sequence 427, App
34	452.4	26.2	2500	13	US-10-172-118-427	Sequence 427, App
35	370.6	21.4	601	15	US-10-207-951-24	Sequence 24, Appl
36	124.8	7.2	2607	16	US-10-189-507-3	Sequence 3, Appl
37	124.8	7.2	4382	16	US-10-159-563-147	Sequence 147, App
38	99	5.7	470	13	US-10-085-783A-42809	Sequence 42809, A
39	99	5.7	470	16	US-10-242-535A-42809	Sequence 42809, A
40	89.2	5.2	4751	13	US-10-067-457-4	Sequence 5, Appl
41	89.2	5.2	5065	15	US-10-107-774-973	Sequence 973, App
42	89.2	5.2	5499	13	US-09-855-828-3	Sequence 3, Appl
43	79	4.6	2703	12	US-09-855-828-2	Sequence 2, Appl
44	79	4.6	2703	12	US-09-855-828-1	Sequence 1, Appl
45	79	4.6	2757	12	US-09-855-828-16	Sequence 16, Appl

ALIGNMENTS

RESULT 1
US-09-927-267-3
; Sequence 3, Application US/09927267
; Publication No. US20020182691A1
; GENERAL INFORMATION:
; APPLICANT: Creech, Christopher D.
; APPLICANT: Jegla, Timothy J.
; APPLICANT: ICGen, Inc.
; TITLE OF INVENTION: CNG2B: A No. US20020182691A1el Human Cyclic Nucleotide-Gated Ion
; FILE REFERENCES: 018512-006510US
; CURRENT APPLICATION NUMBER: US/09/927,267
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: US 60/226,253
; PRIOR FILING DATE: 2000-08-17
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: Patentrin Ver. 2.1
; SEQ ID NO 3
; LENGTH: 1728
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: cyclic nucleotide-gated cation channel 2B (CNG2B)
; NAME/KEY: CDS
; LOCATION: (1)..(1728)
; OTHER INFORMATION: CNG2B
; US-09-927-267-3

Query Match 100.0%; Score 1728; DB 9; Length 1728;
Best local similarity 100.0%; Pred. No. 0;
Matches 1728; Conservative 0; Indels 0; Gaps 0;

QY 1 ATGAGCCAGGACCAACAAAGTGAAGCAACAGCTCCAGTCCCGCCAGCCATCCAGGCC 60
DB 1 ATGAGCCAGGACCAACAAAGTGAAGCAACAGCTCCAGTCCCGCCAGCCATCCAGGCC 60

QY	6	AGGAAGTTGCTGCGCTGTCCTTGAGACCCAACTGCGGGATTACTACTACTGCTGGCTGAAACAA	120
Db	61	AGGAAGTTGCTGCTGCTGTCCTTGAGACCCAACTGCGGGATTACTACTACTGCTGGCTGAAACAA	120
QY	121	ATGGTCTTCCAGTCATGATGATTAACCTCATATCCTGTTGTCAGAGCCCTGTTCCCGAC	180
Db	121	ATGGTCTTCCAGTCATGATGATTAACCTCATATCCTGTTGTCAGAGCCCTGTTCCCGAC	180
QY	181	TTTGACAGACGGTTATCTGGTGGCCCTGGTTGGTGTGCTGACCTACAGAGTGAACCTTCTATAC	240
Db	181	TTTGACAGACGGTTATCTGGTGGCCCTGGTTGGTGTGCTGACCTACAGAGTGAACCTTCTATAC	240
QY	241	CTACTAGACATGATGATGATGCTGCTTCCACACAGAGATTTCTTGAAGACAGGGCATCTTGATG	300
Db	241	CTACTAGACATGATGATGATGCTGCTTCCACACAGAGATTTCTTGAAGACAGGGCATCTTGATG	300
QY	301	GACAAAGGTAGGATCTCGAGTCGCTACGTTGCGACCTGGAGTTTCTTCTTGGACCTGGCT	360
Db	301	GACAAAGGTAGGATCTCGAGTCGCTACGTTGCGACCTGGAGTTTCTTCTTGGACCTGGCT	360
QY	361	TTCCCTGATAGCCCAAGATGTGTGTCTACTGTGGGCTGGGACCCGACACACCCACCTTAGG	420
Db	361	TTCCCTGATAGCCCAAGATGTGTGTCTACTGTGGGCTGGGACCCGACACACCCACCTTAGG	420
QY	421	CTGAAGCGCTTCTCCGCGCGCCCGCCTCTTGAGAGGCTTTCGACCGGACAGAGACCCGC	480
Db	421	CTGAAGCGCTTCTCCGCGCGCCCGCCTCTTGAGAGGCTTTCGACCGGACAGAGACCCGC	480
QY	481	ACAGCTTACCCMAATGCTTTGCAATTGCGCAAGCTGATGCTTTACATTTTGTGTCATC	540
Db	481	ACAGCTTACCCMAATGCTTTGCAATTGCGCAAGCTGATGCTTTACATTTTGTGTCATC	540
QY	541	CATTGGAACAGCTGCTATACCTTGGCCCTATCCGCGTACTCGGCTTGGGCGTGAACGCA	600
Db	541	CATTGGAACAGCTGCTATACCTTGGCCCTATCCGCGTACTCGGCTTGGGCGTGAACGCA	600
QY	601	TGGGTGATCCCGGACCCCGCGAGCTGAGCTTTGAGGCTGCGGCGCGCAGTACCTCAT	660
Db	601	TGGGTGATCCCGGACCCCGCGAGCTGAGCTTTGAGGCTGCGGCGCGCAGTACCTCAT	660
QY	661	AGCTTTTACTTCTCCACGCTGATACTGACTACAGTGGGCGATACACCGCGCCAGCCAGG	720
Db	661	AGCTTTTACTTCTCCACGCTGATACTGACTACAGTGGGCGATACACCGCGCCAGCCAGG	720
QY	721	GAAAGAAGTACCTTCTTATGCTGGGCGACTTCTGCTGGCGGTATGGGTTTGGCCACC	780
Db	721	GAAAGAAGTACCTTCTTATGCTGGGCGACTTCTGCTGGCGGTATGGGTTTGGCCACC	780
QY	781	ATCATGGGTACATAGCTGTGTGATCATACATACAAATGAAACCTGGAGATGGCGATTCTAC	840
Db	781	ATCATGGGTACATAGCTGTGTGATCATACATACAAATGAAACCTGGAGATGGCGATTCTAC	840
QY	841	CCAGATCATGCACTGGTGAAGAGTACATGAAGCTGCAGCAAGTCCAAACCGAAGCTGGAG	900
Db	841	CCAGATCATGCACTGGTGAAGAGTACATGAAGCTGCAGCAAGTCCAAACCGAAGCTGGAG	900
QY	901	CGGCGAGTTATTTGACTGGTATCAGCACTGCAAGATCAACAAAGAGATGACCAAGAGTA	960
Db	901	CGGCGAGTTATTTGACTGGTATCAGCACTGCAAGATCAACAAAGAGATGACCAAGAGTA	960
QY	961	GCCATCTTACACGACTTGGCTGAGGGGCTGGGGGAGAAAGTGGCTGTGTCTGTGCACTG	1020
Db	961	GCCATCTTACACGACTTGGCTGAGGGGCTGGGGGAGAAAGTGGCTGTGTCTGTGCACTG	1020
QY	1021	TTCACTCTGAGCGGGGTGCAGATCTTTGAGAACTGTGAGGCGAGCTGCTGGAGAGCTG	1080
Db	1021	TTCACTCTGAGCGGGGTGCAGATCTTTGAGAACTGTGAGGCGAGCTGCTGGAGAGCTG	1080
QY	1081	GTGCTGAAGCTGCAAGCCCAAGCCTACTACACAGGTGAATATGTATGCGCAAGAGAGAC	1140
Db	1081	GTGCTGAAGCTGCAAGCCCAAGCCTACTACACAGGTGAATATGTATGCGCAAGAGAGAC	1140
QY	1141	ATTGGCCCAAGAGATGATCATCTCCGAAGGCTCACTGGCCGTGGTGGCAGATGATGCT	1200

Db	1141	ATTGCCAAGAGATGTATCATTCATCCGAGAGGGTCATCTGGGCGCGGTGGTGGCAGATGATGCT	1200
QY	1201	ATCACACAGTATGTGTGTGCTCGGTGCGAGGGCTCTACTTTGGGGAGTACAGATTCATTAAC	1260
Db	1201	ATCCACACAGTATGTGTGTGCTCGGTGCGAGGGCTCTACTTTGGGGAGTATCAGATTCATTAAC	1260
QY	1261	ATCAAAAGGAAACATGTCTGGGAAACCGCGCCACAGCCAAATCAAGAGCTTAGTTATTCA	1320
Db	1261	ATCAAAAGGAAACATGTCTGGGAAACCGCGCCACAGCCAAATCAAGAGCTTAGTTATTCA	1320
QY	1321	GACCTATTCTGCTGAGCAAGAGAGACCTGCGGAGGTGCTGACGAGTATCCACAAGCA	1380
Db	1321	GACCTATTCTGCTGAGCAAGAGAGACCTGCGGAGGTGCTGACGAGTATCCACAAGCA	1380
QY	1381	CAGACCATTCATGGAGGAAAGAGACGTGAGATCTTGCTGAATAATGAACAAATTGGAAGTG	1440
Db	1381	CAGACCATTCATGGAGGAAAGAGACGTGAGATCTTGCTGAATAATGAACAAATTGGAAGTG	1440
QY	1441	AATGCTGAGGAGCTGAGATGCGCCCTGCAGAGAGCCACAGAGTCCCGGCTTACGAGGCTTA	1500
Db	1441	AATGCTGAGGAGCTGAGATGCGCCCTGCAGAGAGCCACAGAGTCCCGGCTTACGAGGCTTA	1500
QY	1501	GACCAAGACGCTGGATGATCTTACACAACAAGTTTGTGCGCTCTCGGCTGAGCTGGAATCC	1560
Db	1501	GACCAAGACGCTGGATGATCTTACACAACAAGTTTGTGCGCTCTCGGCTGAGCTGGAATCC	1560
QY	1561	AGGCCACTTAAAGATTGCTTACCGGATTGAACGGCTGGAGTGGCAGACTCCGAGATGGCCA	1620
Db	1561	AGGCCACTTAAAGATTGCTTACCGGATTGAACGGCTGGAGTGGCAGACTCCGAGATGGCCA	1620
QY	1621	ATGCCCCAGAGCACTGGCTGAGGCTGATGATGACGAGGGTAGGCTGTGAGGAGGAACTTCCAAA	1680
Db	1621	ATGCCCCAGAGCACTGGCTGAGGCTGATGATGACGAGGGTAGGCTGTGAGGAGGAACTTCCAAA	1680
QY	1681	GATGAAGAAGGCGACGCGCCAGCCAGAGAGGAAACCCCAAGTCCAGAGTGA	1728
Db	1681	GATGAAGAAGGCGACGCGCCAGCCAGAGAGGAAACCCCAAGTCCAGAGTGA	1728

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US-10-189-507-2
RESULT 2
US-10-189-507-2
; Sequence 2, Application US/10189507
; Publication No. US20030228633A1
; GENERAL INFORMATION:
; APPLICANT: ZOLLER, MARK
; APPLICANT: XU, HONG
; APPLICANT: STASZEWSKI, LENA
; APPLICANT: MOYER, BRYAN
; APPLICANT: PRONIN, ALEXY
; APPLICANT: ADLER, JON ELLIOT
; APPLICANT: SERVANT, GUY
; APPLICANT: CALLANARAS, NICHOLAS
; TITLE OF INVENTION: EXPRESSION OF FUNCTIONAL HUMAN OLFACTORY CYCLIC
; TITLE OF INVENTION: NUCLEOTIDE GATED (CNG) CHANNEL IN RECOMBINANT HOST
; TITLE OF INVENTION: CELLS AND USE THEREOF IN CELL BASED ASSAYS TO IDENTIFY
; TITLE OF INVENTION: SMELL MODULATORS
; FILE REFERENCE: 078003-0291567
; CURRENT APPLICATION NUMBER: US/10/189,507
; CURRENT FILING DATE: 2003-02-12
; PRIOR APPLICATION NUMBER: 60/303,140
; PRIOR FILING DATE: 2001-07-06
; PRIOR APPLICATION NUMBER: 60/337,154
; PRIOR FILING DATE: 2001-12-10
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 1728
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-189-507-2
Query Match 100.0%; Score 1728; DB 16; Length 1728;

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Best Local Similarity 100.0%; Pred. No. 0;
Matches 1728; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 ATGAGCCAGGACCAAGGAGAGACAGACAGAGCTCCAGCCAGCCATCCAGAGCC 60
QY 61 AGGAGGTTGCTGCTGCTGCTGAGCCATCTGGGAGATTACTACTAGTGGTGAACACA 120
Db 61 AGGAGGTTGCTGCTGCTGCTGAGCCATCTGGGAGATTACTACTAGTGGTGAACACA 120
QY 121 ATGCTCTTCCAGTCATGTAACCTTCATCATCTCTGTCGAGAGCTCTTCCCGAC 180
Db 121 ATGCTCTTCCAGTCATGTAACCTTCATCATCTCTGTCGAGAGCTCTTCCCGAC 180
QY 181 TTGAGAGAGGTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 240
Db 181 TTGAGAGAGGTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 240
QY 241 CTACTAGACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 300
Db 241 CTACTAGACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 300
QY 301 GACAGAGGTTAGATCTGAGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 360
Db 301 GACAGAGGTTAGATCTGAGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 360
QY 361 TTCCTATGCGCCAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
Db 361 TTCCTATGCGCCAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
QY 421 CTGACACGCTTCTGCGCGCGCCGCTCTTCTGAGGCTTCTGACCGCAGAGACCGC 480
Db 421 CTGACACGCTTCTGCGCGCGCCGCTCTTCTGAGGCTTCTGACCGCAGAGACCGC 480
QY 481 ACAGCTTACCCAAATGCTTTCGATTCGCAAGCTGATGCTTATATTTTGTGCTATC 540
Db 481 ACAGCTTACCCAAATGCTTTCGATTCGCAAGCTGATGCTTATATTTTGTGCTATC 540
QY 541 CATTTGAAAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 600
Db 541 CATTTGAAAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 600
QY 601 TGGGTGTAACCCGAGACCCCGCGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
Db 601 TGGGTGTAACCCGAGACCCCGCGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
QY 661 AGCTTTTACTTCTTCACGCTGATATCTGATCAAGTGGGCGATACACCGCGCAGCAG 720
Db 661 AGCTTTTACTTCTTCACGCTGATATCTGATCAAGTGGGCGATACACCGCGCAGCAG 720
QY 721 GAAGAAGAGTACTCTTCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 780
Db 721 GAAGAAGAGTACTCTTCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 780
QY 781 ATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 840
Db 781 ATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 840
QY 841 CCAGATCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 900
Db 841 CCAGATCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 900
QY 901 CGGCGAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 960
Db 901 CGGCGAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 960
QY 961 GCATCTTACAGCACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1020
Db 961 GCATCTTACAGCACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1020
QY 1021 TCACTCTGAGCCGGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1080
Db 1021 TCACTCTGAGCCGGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1080
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Db 1021 TCACTCTGAGCCGGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1080
QY 1081 GTGCTGAGCTGAGCCGCCAGACCTTCTACCGAGTGAATATGATGCGCAAGAGAC 1140
Db 1081 GTGCTGAGCTGAGCCGCCAGACCTTCTACCGAGTGAATATGATGCGCAAGAGAC 1140
QY 1141 ATTGGCCAAAGATGATCATCTGAGAGGCTCAATGCGCTGCTGCTGCTGCTGCTG 1200
Db 1141 ATTGGCCAAAGATGATCATCTGAGAGGCTCAATGCGCTGCTGCTGCTGCTGCTG 1200
QY 1201 ATACACAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1260
Db 1201 ATACACAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1260
QY 1261 ATCAAGAGGAAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1320
Db 1261 ATCAAGAGGAAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1320
QY 1321 GACCTATTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1380
Db 1321 GACCTATTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1380
QY 1381 CAGACATCATGAGAGGAAAGAGCTGAGATCTGCTGCTGCTGCTGCTGCTGCTG 1440
Db 1381 CAGACATCATGAGAGGAAAGAGCTGAGATCTGCTGCTGCTGCTGCTGCTGCTG 1440
QY 1441 AATGCTGAGGCACTGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1500
Db 1441 AATGCTGAGGCACTGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1500
QY 1501 GACCAAGAGCTGATGATCTACAGACCAAGTTGCTGCTGCTGCTGCTGCTGCTG 1560
Db 1501 GACCAAGAGCTGATGATCTACAGACCAAGTTGCTGCTGCTGCTGCTGCTGCTG 1560
QY 1561 AGCGCACTTAAGTTGCTTACCGCATTTGAACGCTGAGTGGAGACTCGAGAGTG 1620
Db 1561 AGCGCACTTAAGTTGCTTACCGCATTTGAACGCTGAGTGGAGACTCGAGAGTG 1620
QY 1621 ATGCGGAGGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1680
Db 1621 ATGCGGAGGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1680
QY 1681 GATGAAGAGGCAAGGCGCAGACCGCAGAGGAGACCCCGAGTCCAGAGTGA 1728
Db 1681 GATGAAGAGGCAAGGCGCAGACCGCAGAGGAGACCCCGAGTCCAGAGTGA 1728

RESULT 3
US-09-927-267-2
; Sequence 2, Application US/09927267
; Publication No. US20020182691A1
; GENERAL INFORMATION:
; APPLICANT: Crech, Christopher D.
; APPLICANT: Jegla, Timothy J.
; APPLICANT: ICAGEN, Inc.
; TITLE OF INVENTION: CNG2B: A No. US20020182691A1 Human Cyclic Nucleotide-Gated Ion
; FILE REFERENCE: 018512-006510US
; CURRENT APPLICATION NUMBER: US/09/927, 267
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: US 60/226,253
; PRIOR FILING DATE: 2000-08-17
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 2308
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: cyclic nucleotide-gated cation channel 2B (CNG2B)
; OTHER INFORMATION: complete nucleotide sequence derived from assembly
; NAME/KEY: CDS
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LOCATION: (333)..(2060)
OTHER INFORMATION: CNG2B
US-09-927-267-2

Query Match 100.0%; Score 1728; DB 9; Length 2308;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1728; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 ATGAGCCAGGACACCAAGTGAAGACACAGATCCAGTCCCAAGCCCAATCCAGAGCC 60
DB 333 ATGAGCCAGGACACCAAGTGAAGACACAGATCCAGTCCCAAGCCCAATCCAGAGCC 392
QY 61 AGAAGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 120
DB 393 AGAAGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 452
QY 121 ATGCTTTTCCAGTATGATATATACCTCATCATCTCTGCTGCTGCTGCTGCTGCTGCTGCT 180
DB 453 ATGCTTTTCCAGTATGATATATACCTCATCATCTCTGCTGCTGCTGCTGCTGCTGCTGCT 512
QY 181 TTGACAGACGGTTATCTGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 240
DB 513 TTGACAGACGGTTATCTGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 572
QY 241 CTACTAGACATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 300
DB 573 CTACTAGACATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 632
QY 301 GACAAAGGATAGATCTGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 360
DB 633 GACAAAGGATAGATCTGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 692
QY 361 TCCCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 420
DB 693 TCCCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 752
QY 421 CTGAAGCGCTTCTCTGCGCGCGCGCGCGCTCTGCGAGGCTTCTGCGACCGACAGAGACCGCG 480
DB 753 CTGAAGCGCTTCTCTGCGCGCGCGCGCGCTCTGCGAGGCTTCTGCGACCGACAGAGACCGCG 812
QY 481 ACAGCTTACCCAAATGCTTTCGATTTGCAATGCTTTCATTTTGTGCTGCTGCTGCTGCTGCT 540
DB 813 ACAGCTTACCCAAATGCTTTCGATTTGCAATGCTTTCATTTTGTGCTGCTGCTGCTGCTGCT 872
QY 541 CATTTGAAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 600
DB 873 CATTTGAAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 932
QY 601 TGGGTGTACCCGACCCCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
DB 933 TGGGTGTACCCGACCCCGCGCGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 992
QY 661 AGCTTTTACTTCTTCAAGCTGATTAAGTCAAGTGGGCGATATACCGCGCGCGCGCGCGCGCG 720
DB 993 AGCTTTTACTTCTTCAAGCTGATTAAGTCAAGTGGGCGATATACCGCGCGCGCGCGCGCGCG 1052
QY 721 GAAGAAGAGTACCTCTTCAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 780
DB 1053 GAAGAAGAGTACCTCTTCAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1112
QY 781 ATCATGGGTAGCATGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 840
DB 1113 ATCATGGGTAGCATGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1172
QY 841 CCAGATCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 900
DB 1173 CCAGATCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1232
QY 901 CGCGAGATTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 960
DB 1233 CGCGAGATTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1292
QY 961 GCCATCTTACAGCATTTGCTGAGCGGCTGCGGCGAGAGTGGCTGTGTGCTGCTGCTGCTGCTGCT 1020

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DB 1293 GCCATCTTACAGCATTTGCTGAGCGGCTGCGGCGAGAGTGGCTGTGTGCTGCTGCTGCTGCTGCT 1352
QY 1021 TCCACTCTGAGCGCGGCTGAGATATCTTTCAGAACTGTGAGGCGACCTGCTGAGAGGCTG 1080
DB 1353 TCCACTCTGAGCGCGGCTGAGATATCTTTCAGAACTGTGAGGCGACCTGCTGAGAGGCTG 1412
QY 1081 GTGCTGAAGCTGAGCGCGCGCGCGCGCTTACTTACAGAGTGAATGTATGCTGCGCAAGAGAG 1140
DB 1413 GTGCTGAAGCTGAGCGCGCGCGCGCGCTTACTTACAGAGTGAATGTATGCTGCGCAAGAGAG 1472
QY 1141 ATTGGCCCAAGAGATGTATCATATCATCCGAGAGGCTCAATGCGCGCGGCTGAGAGATGATGCT 1200
DB 1473 ATTGGCCCAAGAGATGTATCATATCATCCGAGAGGCTCAATGCGCGCGGCTGAGAGATGATGCT 1552
QY 1201 ATCAGACAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1260
DB 1533 ATCAGACAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1592
QY 1261 ATCAAAGGGAACATGTCTGAGGAACCGCGCGACAGCCCAATCAAGAGCTTATGTTATTTCA 1320
DB 1593 ATCAAAGGGAACATGTCTGAGGAACCGCGCGACAGCCCAATCAAGAGCTTATGTTATTTCA 1652
QY 1321 GACCTATTTGCTGCTGAGCAAGAGAGACCTGCGGAGGCTGCTGAGCGAGTATCCACAAGCA 1380
DB 1653 GACCTATTTGCTGCTGAGCAAGAGAGACCTGCGGAGGCTGCTGAGCGAGTATCCACAAGCA 1712
QY 1381 CAGACCATATGAGAGAGAAAGACGTGAGATCTGCTGTAATGAATGAACAAATTGAGAGCTG 1440
DB 1713 CAGACCATATGAGAGAGAAAGACGTGAGATCTGCTGTAATGAATGAACAAATTGAGAGCTG 1772
QY 1441 AATGCTGAGGAGCTGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1500
DB 1773 AATGCTGAGGAGCTGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1832
QY 1501 GACCAGAGCTGATGATCTTACAGACCAAGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1560
DB 1833 GACCAGAGCTGATGATCTTACAGACCAAGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1892
QY 1561 AGCGCACTTAAGATGCTTACCGCATTTGAACGCGCTGAGTGGCACTCGAGAGTGGCCA 1620
DB 1893 AGCGCACTTAAGATGCTTACCGCATTTGAACGCGCTGAGTGGCACTCGAGAGTGGCCA 1952
QY 1621 ATGCCGAGAGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1680
DB 1953 ATGCCGAGAGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2012
QY 1681 GATGAAGAGGCGAGGCGCAGCCAGAGAGGAGACCCCAAGTCCAGAGTGA 1728
DB 2013 GATGAAGAGGCGAGGCGCAGCCAGAGAGGAGGAGACCCCAAGTCCAGAGTGA 2060

RESULT 4
US-10-302-172-351
; Sequence 351, Application US/10302172
; Publication No. US20040053250A1
; GENERAL INFORMATION:
; APPLICANT: Tang, Y. Tom
; APPLICANT: Xue, Aiding J.
; APPLICANT: Dimañac, Radoje T.
; TITLE OF INVENTION: No. US20040053250A1e1 Arginine-rich Protein-like Nucleic Acids and
; FILE REFERENCE: 803.1CNDP
; CURRENT APPLICATION NUMBER: US/10/302.172
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US 10/225,251
; PRIOR FILING DATE: 2002-08-20
; PRIOR APPLICATION NUMBER: PCT US02/05095
; PRIOR FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 09/799,451
; PRIOR FILING DATE: 2001-03-05
; NUMBER OF SEQ ID NOS: 950
; SOFTWARE: pt_genes Version 2.0

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SEQ ID NO 351
LENGTH: 2366
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (639) .. (2363)
US-10-302-172-351

Query Match 100.0%; Score 1728; DB 13; Length 2366;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1728; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGCAGAGACACCAAGTGAAGACACAGAGTCCAGTCCCCCAAGCCCATCCAAAGGC 60
DB 639 ATGAGCAGAGACACCAAGTGAAGACACAGAGTCCAGTCCCCCAAGCCCATCCAAAGGC 698
QY 61 AGGAAAGTGTCTGCTGCTGTGAGCCCATCTGAGGATTTACTACTGTGTGCTGAACACA 120
DB 699 AGGAAAGTGTCTGCTGCTGTGAGCCCATCTGAGGATTTACTACTGTGTGCTGAACACA 758
QY 121 ATGGTCTTCCAGTATGATTAACCTGATCCTCGTGTGAGAGAGCTGCTTCCCGGAC 180
DB 759 ATGGTCTTCCAGTATGATTAACCTGATCCTCGTGTGAGAGAGCTGCTTCCCGGAC 818
QY 181 TTGACAGACGTTATCTGTGTGCTGTGCTGTGCTGAGTGAAGTGAAGTGAAGTGAAG 240
DB 819 TTGACAGACGTTATCTGTGTGCTGTGCTGTGCTGAGTGAAGTGAAGTGAAGTGAAG 878
QY 241 CTACTAGACATGATGTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGT 300
DB 879 CTACTAGACATGATGTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGT 938
QY 301 GACAAAGGATGATCTGAGTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCT 360
DB 939 GACAAAGGATGATCTGAGTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCT 998
QY 361 TCCCTATGCCCCCAGATGTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCT 420
DB 999 TCCCTATGCCCCCAGATGTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCT 1058
QY 421 CTGAAACGCTTTCTCGCGCGCCCGCTTCTGAGGCGCTTCTGAGCGCAGACAGAGCCGC 480
DB 1059 CTGAAACGCTTTCTCGCGCGCCCGCTTCTGAGGCGCTTCTGAGCGCAGACAGAGCCGC 1118
QY 481 ACAGCTTACCCAAATGCTTTCGATTTGCAATGCTGATTTGCTGATTC 540
DB 1119 ACAGCTTACCCAAATGCTTTCGATTTGCAATGCTGATTTGCTGATTC 1178
QY 541 CATTTGAAACGCTTCTGATTTGCAATGCTGATTTGCTGATTTGCTGATTTGCTGATTT 600
DB 1179 CATTTGAAACGCTTCTGATTTGCAATGCTGATTTGCTGATTTGCTGATTTGCTGATTT 1238
QY 601 TGGGTGTACCCCGAGACCCCGCGAGCTGCTTGAAGCGCTGTGCGCGCAGTACTCTTAT 660
DB 1239 TGGGTGTACCCCGAGACCCCGCGAGCTGCTTGAAGCGCTGTGCGCGCAGTACTCTTAT 1298
QY 661 AGCTTTTACTTCTTCCAGCTGATTAATGATGATGATGATGATGATGATGATGATGATG 720
DB 1299 AGCTTTTACTTCTTCCAGCTGATTAATGATGATGATGATGATGATGATGATGATGATG 1358
QY 721 GAAGAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 780
DB 1359 GAAGAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1418
QY 781 ATCATGGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 840
DB 1419 ATCATGGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1478
QY 841 CCGATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 900
DB 1479 CCGATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1538

QY 901 CGGCGATTTATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 960
DB 1539 CGGCGATTTATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1598
QY 961 GCGATCTTACAGCATTTGCTGAGGCGCTGAGGCGGAGAGTGGCTGTGCTGTGACCTG 1020
DB 1599 GCGATCTTACAGCATTTGCTGAGGCGCTGAGGCGGAGAGTGGCTGTGCTGTGACCTG 1658
QY 1021 TCCACTCTGAGCGGCGTGCAGATCTTTTCAAGATGATGAGGCGGAGGCTGTGAGAGCTG 1080
DB 1659 TCCACTCTGAGCGGCGTGCAGATCTTTTCAAGATGATGAGGCGGAGGCTGTGAGAGCTG 1718
QY 1081 GTGCTGAAGCTGAGCGGCGGAGCTTACTGACAGTGAATGATGATGATGATGATGATGAT 1140
DB 1719 GTGCTGAAGCTGAGCGGCGGAGCTTACTGACAGTGAATGATGATGATGATGATGATGAT 1778
QY 1141 ATTTGCGCAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1200
DB 1779 ATTTGCGCAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1838
QY 1201 ATCAGACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1260
DB 1839 ATCAGACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1898
QY 1261 ATCAAGAGGAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1320
DB 1899 ATCAAGAGGAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1958
QY 1321 GACCTATTTCTGCTGAGCAAGAGGAGCTGCGGAGGAGTCTGAGAGGATGATCCAGAGA 1380
DB 1959 GACCTATTTCTGCTGAGCAAGAGGAGCTGCGGAGGAGTCTGAGAGGATGATCCAGAGA 2018
QY 1381 CAGACCATGATGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1440
DB 2019 CAGACCATGATGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2078
QY 1441 AATGCTGAGCAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1500
DB 2079 AATGCTGAGCAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2138
QY 1501 GACGAGACCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1560
DB 2139 GACGAGACCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2198
QY 1561 AGGCACTTAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1620
DB 2199 AGGCACTTAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2258
QY 1621 ATGCGCGAGGAGCTGCTGAGCTGATGATGATGATGATGATGATGATGATGATGATG 1680
DB 2259 ATGCGCGAGGAGCTGCTGAGCTGATGATGATGATGATGATGATGATGATGATGATG 2318
QY 1681 GATGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1728
DB 2319 GATGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2366

RESULT 5
US-10-311-624-2
Sequence 2, Application US/10311624
Publication No. US20040127683A1
GENERAL INFORMATION:
APPLICANT: INCYTE GENOMICS, INC.
APPLICANT: RAHMANN, Brigitte E.
APPLICANT: Sanjanwala, Madhu S.
APPLICANT: TRIBOUTY, Catherine M.
APPLICANT: Walia, Nandier K.
TITLE OF INVENTION: TRANSPORTERS AND ION CHANNELS
FILE REFERENCE: SI-0141 PCT
CURRENT APPLICATION NUMBER: US/10/311,624
CURRENT FILING DATE: 2002-12-17
PRIORITY APPLICATION NUMBER: 60/215,391
PRIORITY FILING DATE: 2000-06-29

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; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PERL Program
; SEQ ID NO 2
; LENGTH: 2013
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incycle ID No: 6703242CBI
US-10-311-624-2

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Query Match      99.9%; Score 1726.4; DB 17; Length 2013;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1727; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1 ATGAGCCAGGACCCAAAGTGAAGACAAAGAGCCGACCCCAAGCCCAATCCAAAGCC 60
DB 124 ATAGCCAGGACCCAAAGTGAAGACAAAGAGCCGACCCCAAGCCCAATCCAAAGCC 183
QY 61 AGGAAGTTGCTGCTGCTCTGAGCCCATCTGGGATTAATTAATTAATTAATTAATTA 120
DB 184 AGGAAGTTGCTGCTGCTGCTGAGCCCATCTGGGATTAATTAATTAATTAATTAATTA 243
QY 121 ATAGTCTTCCAGTATGATTAACCTTATATCTCTGCTGAGAGCTTCTCCCGAC 180
DB 244 ATAGTCTTCCAGTATGATTAACCTTATATCTCTGCTGAGAGCTTCTCCCGAC 303
QY 181 TTGACAGAGGTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 240
DB 304 TTGACAGAGGTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 363
QY 241 CTACTAGACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 300
DB 364 CTACTAGACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 423
QY 301 GACAAAGGTTAGATCTTCCAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 360
DB 424 GACAAAGGTTAGATCTTCCAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 483
QY 361 TTCCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 420
DB 484 TTCCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 543
QY 421 CTGAACCGCTTCTCCGCGCGCCCGCTCTTGAAGGCTTGAAGGCTTGAAGGCTTGA 480
DB 544 CTGAACCGCTTCTCCGCGCGCCCGCTCTTGAAGGCTTGAAGGCTTGAAGGCTTGA 603
QY 481 AAGAGCTTACCCAAATGCTTTCGATTCGCAAGCTGATGCTTTCGATTCGATTC 540
DB 604 AAGAGCTTACCCAAATGCTTTCGATTCGCAAGCTGATGCTTTCGATTCGATTC 663
QY 541 CATTGGAACAGCTGCTTATCTTTCGATTCGCAAGCTGATGCTTTCGATTCGATTC 600
DB 664 CATTGGAACAGCTGCTTATCTTTCGATTCGCAAGCTGATGCTTTCGATTCGATTC 723
QY 601 TGGGTGTACCCGGAACCCCGCGAGCTGCTTGAAGGCTTGAAGGCTTGAAGGCTTGA 660
DB 724 TGGGTGTACCCGGAACCCCGCGAGCTGCTTGAAGGCTTGAAGGCTTGAAGGCTTGA 783
QY 661 AGCTTTTATCTTCTCAACGCTGATTAATTAATTAATTAATTAATTAATTAATTAAT 720
DB 784 AGCTTTTATCTTCTCAACGCTGATTAATTAATTAATTAATTAATTAATTAATTAAT 843
QY 721 GAAGAAGAGTACCTCTTCAATGAGGAGCTTCTGCTGCTGCTGCTGCTGCTGCTGCT 780
DB 844 GAAGAAGAGTACCTCTTCAATGAGGAGCTTCTGCTGCTGCTGCTGCTGCTGCTGCT 903
QY 781 ATCATGAGTATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 840
DB 904 ATCATGAGTATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 963
QY 841 CCAATATATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 900

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DB 964 CCAATATATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1023
QY 901 CGGAGAGTTATTTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 960
DB 1024 CGGAGAGTTATTTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1083
QY 961 GCCATCTTACAGACCTTTCGCTGAGGCTTTCGCTGAGGCTTTCGCTGAGGCTTTCGCT 1020
DB 1084 GCCATCTTACAGACCTTTCGCTGAGGCTTTCGCTGAGGCTTTCGCTGAGGCTTTCGCT 1143
QY 1021 TCCACTCTGAGCCGCGGCTGAGATCTTTCAGACCTGCTGAGGCTTTCGAGGCTTTCGAG 1080
DB 1144 TCCACTCTGAGCCGCGGCTGAGATCTTTCAGACCTGCTGAGGCTTTCGAGGCTTTCGAG 1203
QY 1081 GTGCTGAAGCTGAGCCCGGAGCTTTCAGACCTGCTGAGGCTTTCGAGGCTTTCGAG 1140
DB 1204 GTGCTGAAGCTGAGCCCGGAGCTTTCAGACCTGCTGAGGCTTTCGAGGCTTTCGAG 1263
QY 1141 ATTGGCCAAAGATGATGATCAATCCGAGAGGCTCAATGCTGCTGCTGCTGCTGCTGCT 1200
DB 1264 ATTGGCCAAAGATGATGATCAATCCGAGAGGCTCAATGCTGCTGCTGCTGCTGCTGCT 1323
QY 1201 ATCAACAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1260
DB 1324 ATCAACAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1383
QY 1261 ATCAAAAGGAAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1320
DB 1384 ATCAAAAGGAAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1443
QY 1321 GACCTATTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1380
DB 1444 GACCTATTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1503
QY 1381 CAGACCATATGAGGAGGAAAGGAGCTGAGATCTTCTGCTGCTGCTGCTGCTGCTGCTGCT 1440
DB 1504 CAGACCATATGAGGAGGAAAGGAGCTGAGATCTTCTGCTGCTGCTGCTGCTGCTGCTGCT 1563
QY 1441 AATGCTGAGGAGCTGAGATTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1500
DB 1564 AATGCTGAGGAGCTGAGATTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1623
QY 1501 GACGAGCAGCTGAGATGATCAAGACCAAGTTCGCTGCTGCTGCTGCTGCTGCTGCTGCT 1560
DB 1624 GACGAGCAGCTGAGATGATCAAGACCAAGTTCGCTGCTGCTGCTGCTGCTGCTGCTGCT 1683
QY 1561 AGCGCATTAAGATTCGCTTACCGCATTTGAAGGCTGAGGCTGAGGCTGAGGCTGAGG 1620
DB 1684 AGCGCATTAAGATTCGCTTACCGCATTTGAAGGCTGAGGCTGAGGCTGAGGCTGAGG 1743
QY 1621 ATGCCCGAGAGCTTGGCTGAGGCTGATGAGAGGCTGAGGCTGAGGCTGAGGCTGAGG 1680
DB 1744 ATGCCCGAGAGCTTGGCTGAGGCTGATGAGAGGCTGAGGCTGAGGCTGAGGCTGAGG 1803
QY 1681 GATGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1728
DB 1804 GATGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1851

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RESULT 6
US-09-842-758-29
; Sequence 29, Application US/09842758
; Publication No. US20030083244A1
; GENERAL INFORMATION:
; APPLICANT: Vermet, Corine A. M.
; APPLICANT: Fernandes, Elina R.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Shinkens, Richard A
; APPLICANT: Malyskay, Uriel M
; APPLICANT: Boldog, Ferenc L
; APPLICANT: Zeinussen, Bryan D
; APPLICANT: Spylek, Kimberly A
; APPLICANT: Majumder, Kumud

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APPLICANT: Tchernev, Velizar T
APPLICANT: Padigaru, Muralidhara
APPLICANT: Palturajan, Meera
APPLICANT: Burgess, Catherine E
APPLICANT: Gangolli, Esha A
APPLICANT: Smithson, Glenda
APPLICANT: Rastelli, Luca
APPLICANT: MacDougall, John R
APPLICANT: Taupier, Raymond J
APPLICANT: Grose, William M
APPLICANT: Edward, Szekeres S
APPLICANT: Alsobrook II, John P
TITLE OF INVENTION: No. US2003008324A1el Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 15966-783
CURRENT APPLICATION NUMBER: US/09/842, 758
CURRENT FILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: 60/200,158
PRIOR FILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: 60/200,613
PRIOR FILING DATE: 2000-04-28
PRIOR APPLICATION NUMBER: 60/200,780
PRIOR FILING DATE: 2000-04-28
PRIOR APPLICATION NUMBER: 60/201,006
PRIOR FILING DATE: 2000-05-01
PRIOR APPLICATION NUMBER: 60/201,007
PRIOR FILING DATE: 2000-05-01
PRIOR APPLICATION NUMBER: 60/201,236
PRIOR FILING DATE: 2000-05-01
PRIOR APPLICATION NUMBER: 60/201,238
PRIOR FILING DATE: 2000-05-01
PRIOR APPLICATION NUMBER: 60/201,186
PRIOR FILING DATE: 2000-05-02
PRIOR APPLICATION NUMBER: 60/201,474
PRIOR FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 60/201,508
PRIOR FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 60/220,591
PRIOR FILING DATE: 2000-07-25
PRIOR APPLICATION NUMBER: 60/232,678
PRIOR FILING DATE: 2000-09-15
PRIOR APPLICATION NUMBER: 60/263,217
PRIOR FILING DATE: 2001-01-22
PRIOR APPLICATION NUMBER: 60/265,160
PRIOR FILING DATE: 2001-01-30
NUMBER OF SEQ ID NOS: 113
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 29
LENGTH: 2551
TYPE: DNA
ORGANISM: Homo sapiens
US-09-842-758-29
Query Match      99.9%; Score 1726.4; DB 10; Length 2551;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1727; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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301 GACAAAGGTGAGATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 360
1079 GACAAAGGTGAGATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1138
361 TCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 420
1139 TCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1198
421 CTGAAACGCTTTCTCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 480
1199 CTGAAACGCTTTCTCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1258
481 ACAAGCTTACCCCAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 540
1259 ACAAGCTTACCCCAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1318
541 CATTGGAACAGCTGCTTATCTTGTGCTTATCTTGTGCTTATCTTGTGCTTATCTTGTGCTTAT 600
1319 CATTGGAACAGCTGCTTATCTTGTGCTTATCTTGTGCTTATCTTGTGCTTATCTTGTGCTTAT 1378
601 TGGGTGTACCCGGAACCCCGCGAGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
1379 TGGGTGTACCCGGAACCCCGCGAGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1438
661 AGCTTTTACTTCTCCACGCTGATGATGATGATGATGATGATGATGATGATGATGATGATG 720
1439 AGCTTTTACTTCTCCACGCTGATGATGATGATGATGATGATGATGATGATGATGATGATG 1498
721 GAAGAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 780
1499 GAAGAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1558
781 ATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 840
1559 ATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1618
841 CCAGATCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 900
1619 CCAGATCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1678
901 CGGCGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 960
1679 CGGCGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1738
961 GCCATCTTACAGCATCTTGTGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1020
1739 GCCATCTTACAGCATCTTGTGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1798
1021 TCCACTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1080
1799 TCCACTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1858
1081 GTGCTGAAGTGAAGCCCGGACCTTACTCAGAGTGAATATGATGATGATGATGATGATGATG 1140
1859 GTGCTGAAGTGAAGCCCGGACCTTACTCAGAGTGAATATGATGATGATGATGATGATGATG 1918
1141 ATTGGCCAAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1200
1919 ATTGGCCAAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1978
1201 ATCAACAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1260
1979 ATCAACAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2038
1261 ATCAAAAGGAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1320
2039 ATCAAAAGGAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2098
1321 GACCTTATTTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1380
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Db 2099 GACCTATTCTGCTGAGCAAGAGGACCTGCGGAGGTGCTGAGCGAGTATCCACAAGCA 2158
Qy 1381 CAGACCTATCTGAGAGAGAAAGACGTGAGATCTCTGTAATAAACAAGTTGAGCTG 1440
Db 2159 CAGACCTATCTGAGAGAGAAAGACGTGAGATCTCTGTAATAAACAAGTTGAGAGCTG 2218
Qy 1441 AATGCTGAGGAGCTGAGATGCGCTGAGAGAGGCAAGAGTCCGGGCTACAGAGGCTTA 1500
Db 2219 AATGCTGAGGAGCTGAGATGCGCTGAGAGAGGCAAGAGTCCGGGCTACAGAGGCTTA 2278
Qy 1501 GACCAGGAGCTGAGATGCTACAGACCAAGTTGCTGCTGCTGCTGAGCTGAGAGTCC 1560
Db 2279 GACCAGGAGCTGAGATGCTACAGACCAAGTTGCTGCTGCTGCTGAGCTGAGAGTCC 2338
Qy 1561 AGGCACTTAAGATTGCTTACCGGATTGAACCGCTGAGTGGCAGACTTCGAGAGTCCCA 1620
Db 2339 AGGCACTTAAGATTGCTTACCGGATTGAACCGCTGAGTGGCAGACTTCGAGAGTCCCA 2398
Qy 1621 ATGCCCCAGGAGCTGAGCTGATGAGCTGATGAGAGGAGTGAAGGAGGAACTTCCAAA 1680
Db 2399 ATGCCCCAGGAGCTGAGCTGATGAGCTGATGAGAGGAGTGAAGGAGGAACTTCCAAA 2458
Qy 1681 GATGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1728
Db 2459 GATGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2506

RESULT 7
US-10-174-333-29
; Sequence 29, Application US/10174333
; Publication No. US2004029220A1
; GENERAL INFORMATION:
; APPLICANT: Vernet, Corine A.M.
; APPLICANT: Fernandes, Elma R.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Malyankar, Uriel M.
; APPLICANT: Boldog, Ferenc L.
; APPLICANT: Zerhusen, Bryan D.
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Majumder, Kunud
; APPLICANT: Tchernev, Velizar T.
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Patnrajan, Meera
; APPLICANT: Burgess, Catherine E.
; APPLICANT: Gangoli, Esna A.
; APPLICANT: Smithson, Glennda
; APPLICANT: Rastelli, Luca
; APPLICANT: MacDougall, John R.
; APPLICANT: Taupier, Raymond J.
; APPLICANT: Grose, William M.
; APPLICANT: Szekeres, Edward S.
; APPLICANT: Alsobrook, John P.
; APPLICANT: Anderson, David W.
; APPLICANT: Guo, Xiaojia (Sasha)
; APPLICANT: Li, Li
; APPLICANT: Zhong, Mei
; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
; FILE REFERENCE: 15966-783 CIP1
; CURRENT APPLICATION NUMBER: US/10174,333
; PRIOR FILING DATE: 2002-06-18
; PRIOR APPLICATION NUMBER: 60/193,664
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 60/194,614
; PRIOR FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: 60/195,063
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,066
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,067
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,068
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,069

; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,070
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/195,510
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/219,855
; PRIOR FILING DATE: 2000-07-21
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 186
; SOFTWARE: Curation version 0.1
; SEQ ID NO 29
; LENGTH: 2551
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (779) .. (2503)
US-10-174-333-29

Query Match 99.9%; Score 1726.4; DB 13; Length 2551;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1727; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGAGCCAGAGACCAAGTGAAGACACAGAGTCCAGTCCCGAGCCCATCCAAAGCC 60
Db 779 ATGAGCCAGAGACCAAGTGAAGACACAGAGTCCAGTCCCGAGCCCATCCAAAGCC 838
Qy 61 AGGAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 120
Db 839 AGGAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 898
Qy 121 ATGATCTTCCAGTCAATGATTAACCTGATGATGATGATGATGATGATGATGATGATGAT 180
Db 899 ATGATCTTCCAGTCAATGATTAACCTGATGATGATGATGATGATGATGATGATGATGAT 958
Qy 181 TTGACAGACGATATCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 240
Db 959 TTGACAGACGATATCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1018
Qy 241 CTACTAGACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 300
Db 1019 CTACTAGACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1078
Qy 301 GACAAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 360
Db 1079 GACAAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1138
Qy 361 TCCCTGATGCTCCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 420
Db 1139 TCCCTGATGCTCCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1198
Qy 421 CTGACCGCTTTTCTGCG 480
Db 1199 CTGACCGCTTTTCTGCG 1258
Qy 481 ACAAGTTACCAATGCTTTCGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCT 540
Db 1259 ACAAGTTACCAATGCTTTCGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCT 1318
Qy 541 CATTTGAACAGCTGCTTATCTTTCGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGAT 600
Db 1319 CATTTGAACAGCTGCTTATCTTTCGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGAT 1378
Qy 601 TGGGTGATCCCGGAGCCCGGCGAGCTGCTGATGCTGATGCTGATGCTGATGCTGATGCTGAT 660
Db 1379 TGGGTGATCCCGGAGCCCGGCGAGCTGCTGATGCTGATGCTGATGCTGATGCTGATGCTGAT 1438
Qy 661 AGCTTTACTTCCAGAGCTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGAT 720
Db 1439 AGCTTTACTTCCAGAGCTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGATGCTGAT 1498
Qy 721 GAAGAAGATACCTTTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 780

QY 841 CCAGATGATGACCTGGTGAAGAGTACATGAGCTGACGACCTCAACCGGAGCTGGAG 900
 Db 851 CCAGATGATGACCTGGTGAAGAGTACATGAGCTGACGACCTCAACCGGAGCTGGAG 910
 QY 901 CGGCGAGTTATGAGTGGTATCAGACCTGAGATCAACAGAGATGACCAAGAGTGA 960
 Db 911 CGGCGAGTTATGAGTGGTATCAGACCTGAGATCAACAGAGATGACCAAGAGTGA 970
 QY 961 GCCATCTTAAAGCACTTGGCTGAGCGGCTGCGGAGAGTGGTGTGTCTGTGACCTG 1020
 Db 971 GCCATCTTAAAGCACTTGGCTGAGCGGCTGCGGAGAGTGGTGTGTCTGTGACCTG 1030
 QY 1021 TCCGCTCTGAGCGGAGTGAAGATCTTTCAGACCTGAGAGGCAACCTGAGAGAGTGTG 1080
 Db 1031 TCCGCTCTGAGCGGAGTGAAGATCTTTCAGACCTGAGAGGCAACCTGAGAGAGTGTG 1090
 QY 1081 GTGCTGAAGCTGACGCGCCAGACCTACTCAACAGTGAATATGATGCGCAAGAGAGAC 1140
 Db 1091 GTGCTGAAGCTGACGCGCCAGACCTACTCAACAGTGAATATGATGCGCAAGAGAGAC 1150
 QY 1141 ATGGGCGAAGAGATGATCATCATCCGAGAGGCTCAACTGCGCTGTGTGTGAGATGATGT 1200
 Db 1151 ATGGGCGAAGAGATGATCATCATCCGAGAGGCTCAACTGCGCTGTGTGTGAGATGATGT 1210
 QY 1201 ATCAACAGATATGCTGT 1260
 Db 1211 ATCAACAGATATGCTGT 1270
 QY 1261 ATCAAGGGAACATGTCTGGGACCGCGGACAGCCCAACATCAAGAGCTTATGTTATCA 1320
 Db 1271 ATCAAGGGAACATGTCTGGGACCGCGGACAGCCCAACATCAAGAGCTTATGTTATCA 1330
 QY 1321 GACCTATTTCTGCTGAGCAG 1380
 Db 1331 GACCTATTTCTGCTGAGCAG 1390
 QY 1381 CAGACCATCATGAG 1440
 Db 1391 CAGACCATCATGAG 1450
 QY 1441 AATGCTGAGGAG 1500
 Db 1451 AATGCTGAGGAG 1510
 QY 1501 GACCAAGAGCTGATGATCTACAGACCAAGTTTGTGTGTGTGTGTGTGTGTGTGTGTGT 1560
 Db 1511 GACCAAGAGCTGATGATCTACAGACCAAGTTTGTGTGTGTGTGTGTGTGTGTGTGTGT 1570
 QY 1561 AGGCGACTTAAAGATGCTTACCGCATGGAACGCGTGAAGTGGCAGACTCGAGATGGGCA 1620
 Db 1571 AGGCGACTTAAAGATGCTTACCGCATGGAACGCGTGAAGTGGCAGACTCGAGATGGGCA 1630
 QY 1621 ATGCGCGAG 1680
 Db 1631 ATGCGCGAG 1690
 QY 1681 GATGAAG 1728
 Db 1691 GATGAAG 1738

RESULT 9

US-10-207-951-1
 : Sequence 1, Application US/10207951
 : Publication No. US20030013156A1
 : GENERAL INFORMATION:
 : APPLICANT: Karl GIBLER et al.
 : TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
 : TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS
 : FILE REFERENCE: C100063CON
 : CURRENT APPLICATION NUMBER: US/10/207,951

: CURRENT FILING DATE: 2002-07-31
 : PRIOR APPLICATION NUMBER: 09/735,932
 : PRIOR FILING DATE: 2000-12-14
 : PRIOR APPLICATION NUMBER: 60/211,223
 : PRIOR FILING DATE: 2000-06-13
 : NUMBER OF SEQ ID NOS: 25
 : SOFTWARE: FastSeq for Windows Version 4.0
 : SEQ ID NO 1
 : LENGTH: 1758
 : TYPE: DNA
 : ORGANISM: Homo sapiens
 : FEATURE:
 : NAME/KEY: misc feature
 : LOCATION: (1)-(1758)
 : OTHER INFORMATION: n = A,T,C or G
 : US-10-207-951-1
 Query Match 99.6%; Score 1721.6; DB 15; Length 1758;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 1724; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 ATGAGCCAGGACACCAAGTGAAGACACAGAGTCCAGTCCCGACGCCATCCAAAGGCC 60
 Db 11 ATGAGCCAGGACACCAAGTGAAGACACAGAGTCCCGACGCCATCCAAAGGCC 70
 QY 61 AGGAAGTTGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 120
 Db 71 AGGAAGTTGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 130
 QY 121 ATGCTCTTCCAGTCATGATATTAACCTCATATCTCTGTGACAGAGCTGTGCTCCGAC 180
 Db 131 ATGCTCTTCCAGTCATGATATTAACCTCATATCTCTGTGACAGAGCTGTGCTCCGAC 190
 QY 181 TTGAGACAGGTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 240
 Db 191 TTGAGACAGGTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 250
 QY 241 CTACTAGACATGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 300
 Db 251 CTACTAGACATGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 310
 QY 301 GACAAAGGTAGAGATCTGAGTGGTGTGCTGAGTGTGCTGAGTGTGCTGAGTGTGCTGAGTGTGCT 360
 Db 311 GACAAAGGTAGAGATCTGAGTGGTGTGCTGAGTGTGCTGAGTGTGCTGAGTGTGCTGAGTGTGCT 370
 QY 361 TCCCTGATGCCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 420
 Db 371 TCCCTGATGCCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 430
 QY 421 CTGAACGCTTTCTCGGAGGCG 480
 Db 431 CTGAACGCTTTCTCGGAGGCG 490
 QY 481 ACACTTACCCAAATGCGCTTTCGATTCGACAGCTGATGCTTTCATTTTGTGTGCTATC 540
 Db 491 ACACTTACCCAAATGCGCTTTCGATTCGACAGCTGATGCTTTCATTTTGTGTGCTATC 550
 QY 541 CATTGGAACAGCTGCTTACTTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 600
 Db 551 CATTGGAACAGCTGCTTACTTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 610
 QY 601 TGGGTATACCGGAGCG 660
 Db 611 TGGGTATACCGGAGCG 670
 QY 661 AGCTTTTACTTCTCCAGCTGATATCTGATCAGTGGGCGATATACACCGCGCGCGCGCGCGCG 720
 Db 671 AGCTTTTACTTCTCCAGCTGATATCTGATCAGTGGGCGATATACACCGCGCGCGCGCGCGCG 730
 QY 721 GAAGAAGATACCTTCTCATGTGTGGGAGACTTCTGCTGCGCGCTGATATGATGATGATGATGATGAT 780
 Db 731 GAAGAAGATACCTTCTCATGTGTGGGAGACTTCTGCTGCGCGCTGATATGATGATGATGATGATGAT 790

RESULT 12
US-09-735-932-3
; Sequence 3, Application US/09735932
; Patent No. US20020037548A1
; GENERAL INFORMATION:
; APPLICANT: GUEGLER, Karl et al
; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: AND USES THEREOF
; FILE REFERENCE: CL000663
; CURRENT APPLICATION NUMBER: US/09/735,932
; CURRENT FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 10989
; TYPE: DNA
; ORGANISM: Human
US-09-735-932-3

Query Match 37.8%; Score 652.6; DB 9; Length 10989;
Best Local Similarity 99.4%; Pred. No. 1.4e-190;
Matches 655; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 261 CTTCCACACAGAGATTCTTGAACAGAGGATCCTGTGTGTGACAAAGGTAGATCTCGAG 320
DB 3848 CTTCTCCCAAGAGATTCTTGAACAGAGGATCCTGTGTGTGACAAAGGTAGATCTCGAG 3907
QY 321 TCGTACGTTGACCTGTGAGTTCTTTGAACTGTGACTGCTTCCCTGATGCCACAGATGT 380
DB 3908 TCGTACGTTGACCTGTGAGTTCTTTGAACTGTGACTGCTTCCCTGATGCCACAGATGT 3967
QY 381 GGTCTAGGTGGGCTGGGCGCGGACACACCACTGTGAGGCTGAAACCGCTTTCCTCCGCG 440
DB 3968 GGTCTAGGTGGGCTGGGCGCGGACACCACTGTGAGGCTGAAACCGCTTTCCTCCGCG 4027
QY 441 GCCCGGCTCTTTCAGAGGCTTTCAGACCGACAGAGACCGGACAGTTTCCCAATGCTT 500
DB 4028 GCCCGGCTCTTTCAGAGGCTTTCAGACCGACAGAGACCGGACAGTTTCCCAATGCTT 4087
QY 501 TCGCATGCCAAGCTGATGCTTTTACATTTTGTGCTATCCATTGGAACAGCTGCTATA 560
DB 4088 TCGCATGCCAAGCTGATGCTTTTACATTTTGTGCTATCCATTGGAACAGCTGCTATA 4147
QY 561 CTTGGCCCTATCCCGGTACCTGGGCTTGGGCGTGAACGATGGGTATCCCGGACCCGCG 620
DB 4148 CTTGGCCCTATCCCGGTACCTGGGCTTGGGCGTGAACGATGGGTATCCCGGACCCGCG 4207
QY 621 GCAGCTGGCTTTAGAGCGCTGCGGCGCAGTACCTGTATAGCTTTTACTTCCACGCT 680
DB 4208 GCAGCTGGCTTTAGAGCGCTGCGGCGCAGTACCTGTATAGCTTTTACTTCCACGCT 4267
QY 681 GATATCTAGTACAGTGGGCGATACACCGCGCAGCGGACAGGGAAGAAGTACCTTTTAT 740
DB 4268 GATATCTAGTACAGTGGGCGATACACCGCGCAGCGGACAGGGAAGAAGTACCTTTTAT 4327
QY 741 GGTGGGAGACTTCTCGTGGCGCGTATGGGTGGCCACCAATCGGTATAGATGAGGTC 800
DB 4328 GGTGGGAGACTTCTCGTGGCGCGTATGGGTGGCCACCAATCGGTATAGATGAGGTC 4387
QY 801 TGTGATCTACAACTGAACACTGACGATGCGGCTTTTACCCAGATCATGCACTGTGAA 860
DB 4388 TGTGATCTACAACTGAACACTGACGATGCGGCTTTTACCCAGATCATGCACTGTGAA 4447
QY 861 GAAGTACATGAAGCTGACGACGTCACCGCAAGCTGAGGCGGAGTTATTGACTGCT 919
DB 4448 GAAGTACATGAAGCTGACGACGTCACCGCAAGCTGAGGCGGAGTTATTGACTGCT 4506

RESULT 13
US-10-207-951-3
; Sequence 3, Application US/10207951
; Publication No. US2003013156A1

GENERAL INFORMATION:
; APPLICANT: Karl GUEGLER et al.
; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: AND USES THEREOF
; FILE REFERENCE: CL000663CON
; CURRENT APPLICATION NUMBER: US/10/207,951
; CURRENT FILING DATE: 2002-07-31
; PRIOR APPLICATION NUMBER: 09/735,932
; PRIOR FILING DATE: 2000-12-14
; PRIOR APPLICATION NUMBER: 60/211,223
; PRIOR FILING DATE: 2000-06-13
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 10989
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-207-951-3

Query Match 37.8%; Score 652.6; DB 15; Length 10989;
Best Local Similarity 99.4%; Pred. No. 1.4e-190;
Matches 655; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 261 CTTCCACACAGAGATTCTTGAACAGAGGATCCTGTGTGTGACAAAGGTAGATCTCGAG 320
DB 3848 CTTCTCCCAAGAGATTCTTGAACAGAGGATCCTGTGTGTGACAAAGGTAGATCTCGAG 3907
QY 321 TCGTACGTTGACCTGTGAGTTCTTTGAACTGTGACTGCTTCCCTGATGCCACAGATGT 380
DB 3908 TCGTACGTTGACCTGTGAGTTCTTTGAACTGTGACTGCTTCCCTGATGCCACAGATGT 3967
QY 381 GGTCTAGGTGGGCTGGGCGCGGACACACCACTGTGAGGCTGAAACCGCTTTCCTCCGCG 440
DB 3968 GGTCTAGGTGGGCTGGGCGCGGACACCACTGTGAGGCTGAAACCGCTTTCCTCCGCG 4027
QY 441 GCCCGGCTCTTTCAGAGGCTTTCAGACCGACAGAGACCGGACAGTTTCCCAATGCTT 500
DB 4028 GCCCGGCTCTTTCAGAGGCTTTCAGACCGACAGAGACCGGACAGTTTCCCAATGCTT 4087
QY 501 TCGCATGCCAAGCTGATGCTTTTACATTTTGTGCTATCCATTGGAACAGCTGCTATA 560
DB 4088 TCGCATGCCAAGCTGATGCTTTTACATTTTGTGCTATCCATTGGAACAGCTGCTATA 4147
QY 561 CTTGGCCCTATCCCGGTACCTGGGCTTGGGCGTGAACGATGGGTATCCCGGACCCGCG 620
DB 4148 CTTGGCCCTATCCCGGTACCTGGGCTTGGGCGTGAACGATGGGTATCCCGGACCCGCG 4207
QY 621 GCAGCTGGCTTTAGAGCGCTGCGGCGCAGTACCTGTATAGCTTTTACTTCCACGCT 680
DB 4208 GCAGCTGGCTTTAGAGCGCTGCGGCGCAGTACCTGTATAGCTTTTACTTCCACGCT 4267
QY 681 GATATCTAGTACAGTGGGCGATACACCGCGCAGCGGACAGGGAAGAAGTACCTTTTAT 740
DB 4268 GATATCTAGTACAGTGGGCGATACACCGCGCAGCGGACAGGGAAGAAGTACCTTTTAT 4327
QY 741 GGTGGGAGACTTCTCGTGGCGCGTATGGGTGGCCACCAATCGGTATAGATGAGGTC 800
DB 4328 GGTGGGAGACTTCTCGTGGCGCGTATGGGTGGCCACCAATCGGTATAGATGAGGTC 4387
QY 801 TGTGATCTACAACTGAACACTGACGATGCGGCTTTTACCCAGATCATGCACTGTGAA 860
DB 4388 TGTGATCTACAACTGAACACTGACGATGCGGCTTTTACCCAGATCATGCACTGTGAA 4447
QY 861 GAAGTACATGAAGCTGACGACGTCACCGCAAGCTGAGGCGGAGTTATTGACTGCT 919
DB 4448 GAAGTACATGAAGCTGACGACGTCACCGCAAGCTGAGGCGGAGTTATTGACTGCT 4506

RESULT 14
US-10-345-680-27
; Sequence 27, Application US/10345680
; Publication No. US20030148394A1

QY 1501 GACCAGCACTGGATGATCTACAGACCAAGTTTGCTGCTCTGAGCTGAGNCC 1560
Db 1939 GGGTCTCTCCCTGGACACCTGACAGACCGATTTCACGCTCTGCTGAGTACACGCC 1998
QY 1561 AGCGCACTTAAGATTGCTTACCGCATTGAAGGCTGGAGTGGCG 1605
Db 1999 ACCCAGATGAAGATGAAGCAGCGTCTCAGCCCACTGGAAGCCAG 2043

Search completed: September 11, 2004, 01:12:28
Job time : 809.203 secs

Section

Sheet

QY 306 MYOHQINKMTNEVAILQHLPKRAVAVSHSTLSRVOIFONCEASLLEBYLKLQ 365
Db 437 WFDYLMNKTKVDDEKVEKYLPPDKIRARAIANVHDLTKKVFIFDCEAGLLVELVTLQ 496
QY 366 POTSPGEYVCRKGDIGQEMTIREGOLAVVADDDITQYAVLAGALYGEISINIKGM 425
Db 497 PÖVSPGYYICKKDIGEMTIRKESKLA VVADDDVTOFVLSDSGTGEISINIKSK 556
QY 426 SGNRRANIKSLGYSDFCLSKEDIREVLSYEPQOQTMEEKREILKMKLDVNAEAA 485
Db 557 AGNRRANIKSIGYSDFCLSKEDLMEALTEYPPDAKTMLEEKQOILMKDGLDINIANA 616
QY 486 EIALQEAESRLRGDQDLDQTEARLAEBSAKIARIRLE 533
Db 617 GSDPKD-LEEKVTMEGSDVLDQTRFARILAEBSMOCKLQKRLTKE 663

RESULT 2

US-09-275-252A-18
; Sequence 18, Application US/09275252A
; Patent No. 6641997
; GENERAL INFORMATION:
; APPLICANT: MacKinnon, Roderick
; TITLE OF INVENTION: Assays for Screening Compounds Which Interact With
; TITLE OF INVENTION: Cation Channel Proteins, Mutant Prokaryotic Cation
; TITLE OF INVENTION: Channel Proteins, and Uses Thereof
; FILE REFERENCE: 018512-002901US
; CURRENT FILING DATE: 1999-03-24
; PRIOR APPLICATION NUMBER: US/09/045,529
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: US 09/054,347
; PRIOR FILING DATE: 1998-04-02
; PRIOR APPLICATION NUMBER: WO PCT/US99/06307
; PRIOR FILING DATE: 1999-03-22
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 18
; LENGTH: 261
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-275-252A-18

Query Match 28.3%; Score 847; DB 4; Length 261;

Best Local Similarity 59.8%; Pred. No. 2.7e-77;

Matches 156; Conservative 52; Mismatches 53; Indels 0; Gaps 0;

QY 186 LYFALSRYLGFGRDAMVYPPDAQPPFERLRQYLYSPFSTLLITTVGDTPPPAEEEYL 245
Db 1 IYVAISKIGFVDTWYFNTTDPYGLABEYICLYMSTLITTTETPPVXDEYL 60
QY 246 FMVGDPELLAVGPAITGMSMVYNNMTADAAFFPDHALYKTKMLQHVNRKLEERYID 305
Db 61 FVIFDPLGLVLIPTAVIGVSGMISNMNATRAEFQAKIDAVHYVQFVKSGMEAKVIR 120
QY 306 MYOHQINKMTNEVAILQHLPKRAVAVSHSTLSRVOIQNCEASLLEBYLKLQ 365
Db 121 WFDYLMNKTKVDDEKVEKYLPPDKIRARAIANVHDLTKKVFIFDCEAGLLVELVTLR 180
QY 366 POTSPGEYVCRKGDIGQEMTIREGOLAVVADDDITQYAVLAGALYGEISINIKGM 425
Db 181 PÖVSPGYYICKKDIGEMTIRKESKLA VVADDDVTOYVLSDSGTGEISINIKSK 240
QY 426 SGNRRANIKSLGYSDFCLSKEDIREVLSYEPQOQTMEEKREILKMKLDVNAEAA 485
Db 241 MGNRRANIRSLGYSDFCLSKEDIREVLSYEPQOQTMEEKREILKMKLDVNAEAA 616

RESULT 3

US-08-997-685A-46
; Sequence 46, Application US/08997685A

; Patent No. 6551821
; GENERAL INFORMATION:
; APPLICANT: The Trustees of Columbia University
; APPLICANT: Kandel, Eric
; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof
; FILE REFERENCE: 0575/54806
; CURRENT APPLICATION NUMBER: US/08/997,685A
; NUMBER OF SEQ ID NOS: 60
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 46
; LENGTH: 129
; TYPE: PRT
; ORGANISM: rat;
; FEATURE:
; NAME/KEY: NON CONS
; LOCATION: (48)..(49)
; OTHER INFORMATION: gap in alignment
; FEATURE:
; NAME/KEY: NON CONS
; LOCATION: (121)..(122)
; OTHER INFORMATION: gap in alignment
; FEATURE:
; NAME/KEY: NON CONS
; LOCATION: (125)..(126)
; OTHER INFORMATION: gap in alignment
US-08-997-685A-46

Query Match 16.3%; Score 488; DB 4; Length 129;

Best Local Similarity 71.3%; Pred. No. 2.1e-41;

Matches 92; Conservative 20; Mismatches 17; Indels 0; Gaps 0;

QY 356 LLEBYLKLQIPQYSPGEYVCRKGDIGQEMTIREGOLAVVADDDITQYAVLAGALYGE 415
Db 1 LLEBYLKLQIPQYSPGEYVCRKGDIGQEMTIREGOLAVVADDDITQYAVLAGALYGE 60
QY 416 ISIINIKSGMGNRRANIRSLGYSDFCLSKEDIREVLSYEPQOQTMEEKREILKMK 475
Db 61 ISIINIKSGMGNRRANIRSLGYSDFCLSKEDIREVLSYEPQOQTMEEKREILKMK 120
QY 476 NKLDVNAEAA 484
Db 121 GLDENEVA 129

RESULT 4

US-08-997-685A-57

; Sequence 57, Application US/08997685A

; Patent No. 6551821

; GENERAL INFORMATION:

; APPLICANT: The Trustees of Columbia University

; APPLICANT: Kandel, Eric

; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof

; FILE REFERENCE: 0575/54806

; CURRENT APPLICATION NUMBER: US/08/997,685A

; NUMBER OF SEQ ID NOS: 60

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 57

; LENGTH: 126

; TYPE: PRT

; ORGANISM: bovine;

; FEATURE:

; NAME/KEY: NON CONS

; LOCATION: (47)..(48)

; OTHER INFORMATION: gap in alignment

; FEATURE:

; NAME/KEY: NON CONS

; LOCATION: (56)..(57)

; OTHER INFORMATION: gap in alignment

US-08-997-685A-57

Query Match 15.9%; Score 475.5; DB 4; Length 126;

Best Local Similarity 71.7%; Pred. No. 3,6e-40;
Matches 91; Conservative 20; Mismatches 15; Indels 1; Gaps 1;

QY 354 ASLLEELVTLKLPQYSPGEYVCRGDIQEMYYIIRREGQAVVADGITOYAVLGAGLYF 413

Db 1 AGLLVELVTLKLPQYYS-GDYICRKGDIQREMYIIKEKGLAVVADGITOYFVLSDSGSYF 59

QY 414 GEISLINIKGMSGNRRRTANIKSLGYSDFCLSKEDLREVLSEYPOAQTIMEKGRREILL 473

Db 60 GEISLINIKGMSGNRRRTANIKSLGYSDFCLSKEDLREVLSEYPOAQTIMEKGRREILL 119

QY 474 KMKLIDV 480

Db 120 KQGLDID 126

RESULT 5

US-08-997-685A-58

; Sequence 58, Application US/08997685A

; Patent No. 6551821

; GENERAL INFORMATION:

; APPLICANT: The Trustees of Columbia University

; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof

; FILE REFERENCE: 05/5/54806

; CURRENT APPLICATION NUMBER: US/08/997,685A

; CURRENT FILING DATE: 1997-12-12

; NUMBER OF SEQ ID NOS: 60

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 58

; LENGTH: 126

; TYPE: PRT

; ORGANISM: catfish;

; FEATURE:

; NAME/KEY: NON CONS

; LOCATION: (7)..(8)

; OTHER INFORMATION: gap in alignment

; FEATURE:

; NAME/KEY: NON CONS

; LOCATION: (47)..(48)

; OTHER INFORMATION: gap in alignment

; FEATURE:

; NAME/KEY: NON CONS

; LOCATION: (56)..(57)

; OTHER INFORMATION: gap in alignment

; FEATURE:

; NAME/KEY: NON CONS

; LOCATION: (66)..(67)

; OTHER INFORMATION: gap in alignment

US-08-997-685A-58

Query Match 15.7%; Score 468.5; DB 4; Length 126;

Best Local Similarity 71.4%; Pred. No. 1.9e-39;

Matches 90; Conservative 19; Mismatches 16; Indels 1; Gaps 1;

QY 354 ASLLEELVTLKLPQYSPGEYVCRGDIQEMYYIIRREGQAVVADGITOYAVLGAGLYF 413

Db 1 AGLLVELVTLKLPQYSPGDIYICRKGDIQREMYIIKEKGLAVVADGITOYFVLSDSGSYF 59

QY 414 GEISLINIKGMSGNRRRTANIKSLGYSDFCLSKEDLREVLSEYPOAQTIMEKGRREILL 473

Db 60 GEISLINIKGMSGNRRRTANIKSLGYSDFCLSKEDLREVLSEYPOAQTIMEKGRREILL 119

QY 474 KMKLIDV 479

Db 120 KQGLDID 125

RESULT 6

US-08-997-685A-4

; Sequence 4, Application US/08997685A

; Patent No. 6551821

; GENERAL INFORMATION:

; APPLICANT: The Trustees of Columbia University

; APPLICANT: Kandel, Eric

; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof

; FILE REFERENCE: 05/5/54806

; CURRENT APPLICATION NUMBER: US/08/997,685A

; CURRENT FILING DATE: 1997-12-12

; NUMBER OF SEQ ID NOS: 60

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 4

; LENGTH: 528

; TYPE: PRT

; ORGANISM: mouse;

; PUBLICATION INFORMATION:

; DATABASE ACCESSION NUMBER: AAC40125

; DATABASE ENTRY DATE: 1998-05-29

; RELEVANT RESIDUES: (1)..(504)

US-08-997-685A-4

Query Match 15.6%; Score 466.5; DB 4; Length 528;

Best Local Similarity 25.3%; Pred. No. 3.4e-38;

Matches 122; Conservative 109; Mismatches 202; Indels 49; Gaps 12;

QY 26 VLDSGDIYVWMTNTPVPMYNIILVCACFPDLOHGYVAVLVDTSDLYLDMV 85

Db 27 IHHYSDFRFYWMTNTPVPMYNIILVCACFPDLOHGYVAVLVDTSDLYLDMV 84

QY 86 VRPHGFL--EQGLVVDKGRISRYVWTSPFLDIASLMPDPVY----- 129

Db 85 INFRTGVIENETIILDPKIKKKYKRTM--FVDFVSSIVDVIPLIVEKIDSEVYKT 143

QY 130 --VRLGPHPTLRLNPLRAPRLFEAFDRTE-----TRTAPNPAFRIAKIMLYFVVIH 181

Db 144 ARLARIVPFTILSLRLRLIRYHGWBEIIFHMTYDLASVNRICNLISMWLLICH 203

QY 182 WNSCLYFALSRYLGFGRDPAWYPPDPAQGFERLRQY--LYSF---YFSTLIITVDDT 235

Db 204 WDGLQFLVPMLODFPSPDQWVSIN-----NMVHMSSELYSFALFKAMSHMLCIGYGRQ 257

QY 236 PPARREERYLFVWDDELAVVGFATIGSMSSVLYNNMTADAAPFDHALVKKYKQHV 295

Db 258 APESMTDMLTML--SMVIGATCYMFFGHATALLQSLSRSRQYQEKYQVQYMSFKL 316

QY 296 NRKLEERVIVYQHLQINKKMTNEVALILOHLEPRLRAVAASVHLSTLSRYQIFONCEAS 355

Db 317 PADFRQKHIDYEH--RQGKKMSDEDSILGELNGLRREIVAVFNCKKVLASMPFANADPN 375

QY 356 LLEBLVTLKLPQYSPGEYVCRGDIQEMYYIIRREGQAVVADGITOYAVLGAGLYGE 415

Db 376 FVTAMLTRKLEVPQPGDYIIRREGIGKMYFIHGVVSVLTGK--NKEMKLSGSGYGE 433

QY 416 ISLINIKGMSGNRRRTANIKSLGYSDFCLSKEDLREVLSEYPOAQTIMEKGRREILL 475

Db 434 ICL-----LTRGRRTASVRADYICRLYSLSVDNFNEVLEBYPMRRRAFEVAILDRIDRI 487

QY 476 NK 477

Db 488 GK 489

RESULT 7

US-08-997-685A-12

; Sequence 12, Application US/08997685A

; Patent No. 6551821

; GENERAL INFORMATION:

; APPLICANT: The Trustees of Columbia University

; APPLICANT: Kandel, Eric

; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof

; FILE REFERENCE: 05/5/54806

; CURRENT APPLICATION NUMBER: US/08/997,685A

; CURRENT FILING DATE: 1997-12-12

; NUMBER OF SEQ ID NOS: 60

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 12

LENGTH: 597
TYPE: PRT
ORGANISM: human;
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: AAC39760
DATABASE ENTRY DATE: 1998-05-29
RELEVANT RESIDUES: (1)..(597)
US-08-997-685A-12

Query Match 15.1%; Score 450.5; DB 4; Length 597;
Best Local Similarity 25.1%; Pred. No. 1.7e-36;
Matches 124; Conservative 107; Mismatches 209; Indels 55; Gaps 12;

```
QY 26 VLDSGDYVWMLTWFPVWVNNLIIVCRACFPDLOGLVAVMLVLDYSDLLYLMV 85
DB 57 IHHPSDRFYMDLIMIMVGNLIIVGITF--FKDPTAPMIVFVNSDTPFLMDLV 114
QY 86 VRFHTGFL--EGLIVVDKGRISRYRTWSFFLDLASMFTDYY-----129
DB 115 LMFRTGIVIEDNTEIILDPKIKKYLRTW--FVVVFVSSIPVDYIFLVEKGDSEVYKT 173
QY 130 ---VRLGHTPTLRLNRLRAPRLFEAPDRTE---TRTAYPNARLAKMLTYFVYTH 181
DB 174 ARAARIYVFTKILSLRLRLSLRLRYIHQWBEIFHMTYDLASAVMRICNLISMLLCH 233
QY 182 WNSCLYFALSRYLGFGRDAMYPPDPAQGFRLRQVLYSF---YFSTLITTVGDTTP 237
DB 234 WDGLQFLVPMLOPPRCW---SINGVNHSELSYFALFKAMSHMLCIGYGAAP 289
QY 238 PARBEELFWVGDPLAVMGFATIMGSMSSVYNNNTADAAFYPDHALYKKYMLQHYNR 297
DB 290 ESMIDIMLTM--SMIVGATCYAMFVGHATALIOSLSSRRQYQKRYQVQYMSFHKLP 348
QY 298 KLERVIDWYQHLOINKKMTNEVALLOHLPERLRAEVAVSHLSTLSRVQIFQNCASL 357
DB 349 DFRQKHIDYEH--RYQGMFDEDSILGELNGPLREIYNCRKLVAAMPFANADPNFV 407
QY 358 EELVVKLOPQYSPGEYVCRKGDIGQEMYIIRGQLAVAVDDGITQYAVLAGLYFGEIS 417
DB 408 TMLTKLKEFVQFGDYIIRRESTICKMYFIQHGVAVSUTKG--NKEMKLDGSGYFGEIC 465
QY 418 IINIKGMSGNRRITANKISLGYSDLFCLSKEDLREVLSEYPOAQTIMEE-----K 467
DB 466 L-----LTRGRRTASVADTYCRLYSLVDNNEVLEBYPMRRAPETAIDRLDRIGK 519
QY 468 GREILLKMKLDVNA 482
DB 520 KNSILLKRVQHDLS 534
```

RESULT 8
US-08-997-685A-10
Sequence 10, Application US/08997685A
Patent No. 6551821

GENERAL INFORMATION:
APPLICANT: The Trustees of Columbia University

TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof

FILE REFERENCE: 0575/54806

CURRENT APPLICATION NUMBER: US/08/997,685A

NUMBER OF SEQ ID NOS: 60

SOFTWARE: PatentIn version 3.1

SEQ ID NO 10

LENGTH: 749

TYPE: PRT

ORGANISM: human

PUBLICATION INFORMATION:

DATABASE ACCESSION NUMBER: AAC39759

DATABASE ENTRY DATE: 1998-05-29

RELEVANT RESIDUES: (1)..(749)

US-08-997-685A-10

Query Match 14.8%; Score 441.5; DB 4; Length 749;
Best Local Similarity 24.2%; Pred. No. 2.1e-35;
Matches 120; Conservative 116; Mismatches 202; Indels 57; Gaps 15;

```
QY 26 VLDSGDYVWMLTWFPVWVNNLIIVCRACFPDLOGLVAVMLVLDYSDLLYLMV 85
DB 13 IHHPSDRFYMDLIMIMVGNLIIVGITF--FTEQTTPTMIIIFVAVDVTFLMDLI 70
QY 86 VRFHTGFL--EGLIVVDKGRISRYRTWSFFLDLASMFTDYY-----129
DB 71 MNFRTGIVNEDSEIILDPKVIKMYLKS--FVDFISSLIPVDYIFLVEKGDSEVYKT 129
QY 130 ---VRLGHTPTLRLNRLRAPRLFEAPDRTE---TRTAYPNARLAKMLTYFVYTH 178
DB 130 ARAARIYVFTKILSLRLRLSLRLRYIHQWBEIFHMTYDLASAVMRICNLISMLLCH 186
QY 179 VHHNSCLYFALSRYLGFGRDAMYPPDPAQGFRLRQVLYSF---YFSTLITTVGDTTP 236
DB 187 LCHMDGLQFLVPMLOPPRCW---SINGVNHSELSYFALFKAMSHMLCIGYGAOA 244
QY 237 PARBEELFWVGDPLAVMGFATIMGSMSSVYNNNTADAAFYPDHALYKKYMLQHYNR 296
DB 245 FVMSDMLITML--SMIVGATCYAMFVGHATALIOSLSSRRQYQKRYQVQYMSFHKLP 303
QY 297 KLERVIDWYQHLOINKKMTNEVALLOHLPERLRAEVAVSHLSTLSRVQIFQNCASL 356
DB 304 ADMQKHIDYEH--RYQGMFDEDSILGELNGPLREIYNCRKLVAAMPFANADPNF 362
QY 357 LEEVLVKLOPQYSPGEYVCRKGDIGQEMYIIRGQLAVAVDDGITQYAVLAGLYFGEI 416
DB 363 VTAMLSKIRFEVQFGDYIIRREGAVGKKMYFIQHGVAVITKS--SKEMKLDGSGYFGEI 420
QY 417 IINIKGMSGNRRITANKISLGYSDLFCLSKEDLREVLSEYPOAQTIMEE-----466
DB 421 CLLT--KG-----KRTASVADTYCRLYSLVDNNEVLEBYPMRRAPETAIDRLDRIG 474
QY 467 GREILLKMKLDVNA 481
DB 475 KNSILLKRVQHDLN 489
```

RESULT 9
US-08-997-685A-2
Sequence 2, Application US/08997685A
Patent No. 6551821

GENERAL INFORMATION:
APPLICANT: The Trustees of Columbia University

TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof

FILE REFERENCE: 0575/54806

CURRENT APPLICATION NUMBER: US/08/997,685A

NUMBER OF SEQ ID NOS: 60

SOFTWARE: PatentIn version 3.1

SEQ ID NO 2

LENGTH: 910

TYPE: PRT

ORGANISM: mouse

FEATURE:

NAME/KEY: DOMAIN

LOCATION: (130)..(148)

OTHER INFORMATION: S1

FEATURE:

NAME/KEY: DOMAIN

LOCATION: (164)..(185)

OTHER INFORMATION: S2

FEATURE:

NAME/KEY: DOMAIN

LOCATION: (208)..(229)

OTHER INFORMATION: S3

FEATURE:

NAME/KEY: DOMAIN

LOCATION: (243)..(271)

FEATURE:

NAME/KEY: DOMAIN

LOCATION: (243)..(271)

```
OTHER INFORMATION: S4
FEATURE:
NAME/KEY: DOMAIN
LOCATION: (291)..(313)
OTHER INFORMATION: S5
FEATURE:
NAME/KEY: DOMAIN
LOCATION: (332)..(358)
OTHER INFORMATION: P
FEATURE:
NAME/KEY: DOMAIN
LOCATION: (367)..(387)
OTHER INFORMATION: S6
FEATURE:
NAME/KEY: DOMAIN
LOCATION: (472)..(602)
OTHER INFORMATION: CNB
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: AAC53518
DATABASE ENTRY DATE: 1997-12-27
RELEVANT RESIDUES: (1)...(910)
US-08-997-685A-2
```

```
Query Match 14.8% Score 441.5; DB 4; Length 910;
Best Local Similarity 24.2%; Pred. No. 2.9e-35;
Matches 120; Conservative 116; Mismatches 202; Indels 57; Gaps 15;
```

```
QY 26 VLDSGDYVWMLNTPVFWYNNLIIVCRACFPDLQGYLVAMLVLDYSDLYLDMV 85
DB 123 IHHYSDPRFYWDLMIMVGNLIIIPVGITF--FTEQTTTPMIFVNSDVFLLDLI 180
QY 86 VREHTGFL--EQGILVVDKGRISRRYRTWSFPLDLASLMPTDVY----- 129
DB 181 MNFTGTGVNEDSSIIIDPKVKKMYLKSWM-FVVDFTSSIFVDYIFLIVEKMDSEYKT 239
QY 130 ---VRLPHPTPLNPLNPLNPLNPLNPLNPLNPLNPLNPLNPLNPLNPLNPLN 178
DB 240 ARAAIRVRFKILSLRLRLSLRLRLSLRLRLSLRLRLSLRLRLSLRLRLSLRL 296
QY 179 VHHNSCLYALSRYLGFGRDAWVYPPDAPGPFRLRQYLSPY--FSTLILTTVGDP 236
DB 297 LCHWDGCLQFLVPLLDQFPDQWVSLN--EVMNDSWKQYSYALFKAMSHMLCIGY 354
QY 237 PPARBEYLFWGDFLLAVMGFATIMGSSVYNNMTADAAFYPDHALVKKYMKLOHVN 296
DB 355 PVMSMDLITML--SMIVGATCYAMFVGHATALLQSLDSRRQYQYQYQYQYQYQY 413
QY 297 KRLERRVLDWYQHLOINKKMTNEVALIQLHPERLRAEVAVSVHLSTSRVOIFONCEASL 356
DB 414 ADPRQKHDIYEH--RYQOKI FDEENILISELNDPLREIIVNFCRKLAVATMPLFANADPNF 472
QY 357 LEEVLKLOPQYSPGEYVCRKGDIGQEMTIIREGOLAVADDGIQYAVLGAIFYGEI 416
DB 473 VTAMLSKLREVPQPDYIIRREGAVGKMYFIGHGAVGVITTKS--SKEMKLDTGSYFGEI 530
QY 417 SIINIGMNSGNRRITANIKSLGYSDFCLSKEDLREVLSEYPOAQITMER----- 466
DB 531 CLLT-KG-----RTASVADTYCRLYSLSVDNPNFVLEBYPMMRAFEVVALDRIDRG 584
QY 467 KGREILLKXNKLDVN 481
DB 585 KKSISLLQKFQKDLN 599
```

```
RESULT 10
US-08-997-685A-6
Sequence 6, Application US/08997685A
Patent No. 6551821
GENERAL INFORMATION:
APPLICANT: The Trustees of Columbia University
APPLICANT: Kandel, Eric
TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof
FILE REFERENCE: 0575/54806
```

```
CURRENT APPLICATION NUMBER: US/08/997,685A
CURRENT FILING DATE: 1997-12-12
NUMBER OF SEQ ID NOS: 60
SOFTWARE: PatentIn version 3.1
SEQ ID NO 6
LENGTH: 506
TYPE: PRT
ORGANISM: mouse;
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: AAC40126
DATABASE ENTRY DATE: 1998-05-29
RELEVANT RESIDUES: (1)...(506)
US-08-997-685A-6
```

```
Query Match 14.1% Score 420.5; DB 4; Length 506;
Best Local Similarity 25.0%; Pred. No. 1.4e-33;
Matches 112; Conservative 102; Mismatches 189; Indels 45; Gaps 12;
```

```
QY 26 VLDSGDYVWMLNTPVFWYNNLIIVCRACFPDLQGYLVAMLVLDYSDLYLDMV 85
DB 76 IHHYSDPRFYWDLMIMVGNLIIIPVGITF--FXDENTTPMIFVNSDVFLLDLI 133
QY 86 VREHTGFL--EQGILVVDKGRISRRYRTWSFPLDLASLMPTDVY----- 129
DB 134 LNFTGTIVEDNTEIILDPQIKKKYLKSWM-FVVDFTSSIFVEYIFLIVETRISSEYKT 192
QY 130 ---VRLPHPTPLNPLNPLNPLNPLNPLNPLNPLNPLNPLNPLNPLNPLNPLN 181
DB 193 ARAAIRVRFKILSLRLRLSLRLRLSLRLRLSLRLRLSLRLRLSLRLRLSLRL 252
QY 182 WNSCLYALSRYLGFGRDAWVYPPDAPGPF--ELRRQYLSFY--FSTLILTTVGDP 237
DB 253 WDGLQFLVPLMLDQFPDQWV---SINGVNSWQYSALEFKAMSHMLCIGYGRAP 308
QY 238 PAREEYLFWGDFLLAVMGFATIMGSSVYNNMTADAAFYPDHALVKKYMKLOHVN 297
DB 309 VQMSDVLITML--SMIVGATCYAMFIGHATALLQSLDSRRQYQYQYQYQYQYQY 367
QY 298 KRLERRVLDWYQHLOINKKMTNEVALIQLHPERLRAEVAVSVHLSTSRVOIFONCEASL 357
DB 368 DTRQRIHDYEH--RYQOKMFEDESILGELSEPLEEETIINFNCRLVASMPLFANADPNF 426
QY 358 EEVLKLOPQYSPGEYVCRKGDIGQEMTIIREGOLAVADDGIQYAVLGAIFYGEI 417
DB 427 TSMULTKLREVPQPDYIIRREGITGKMYFIGHGAVSVITKG--NKETRLADGSGYFGEI 484
QY 418 IINIKGNSGNRRITANIKSLGYSDFCL 445
DB 485 L-----LTRGRRTASVADTYCRLYSL 506
```

```
RESULT 11
US-09-358-383C-27
Sequence 27, Application US/09358383C
Patent No. 6518398
GENERAL INFORMATION:
APPLICANT: Curtis, Roy A.J.
TITLE OF INVENTION: NOVEL POTASSIUM CHANNEL MOLECULES AND USES THEREFOR
FILE REFERENCE: MNI-055CP
CURRENT APPLICATION NUMBER: US/09/358,383C
CURRENT FILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: USSN 09/119,855
PRIOR FILING DATE: 1998-07-21
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 27
LENGTH: 170
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: domain
US-09-358-383C-27
```

Query Match 13.6%; Score 406; DB 4; Length 170;
 Best Local Similarity 45.6%; Pred. No. 6.7e-33;
 Matches 77; Conservative 38; Mismatches 48; Indels 6; Gaps 2;

181 HNNSCYFALSRKLGGRADAVYPPDAQGF-----ERLRQVLYSFSTLLITVVG-D-234
 1 HNNACLYWISKYQGGSDAMVYGNKPNHMTSTVDNFGKQYICFYMTSLITLITIGGE-60
 235 TPPAREEEYLFWMGDFLLAVMGFATIMGSSSVIYNNMTADAIFYPDHALVKKYMKLQH-294
 61 MSPPTTSFEVFEVFPDVLGVLLFATLIGNVGSMTSMNAARTEFQKMDGVKQYMKYRK-120
 295 VNRKLEKRVTDYQHQLNKKMTNEVAIIQHLPERLRARVAVSVHLSTL-343
 121 IPKELQKRVIKMFEYIMANQGAVDDEEILFELPDKRLAEIATINIMHDTL-169

RESULT 12

US-09-358-383C-22
 ; Sequence 22, Application US/09358383C
 ; Patent No. 6518398
 ; GENERAL INFORMATION:
 ; APPLICANT: Curtiss, Rory A.J.
 ; TITLE OF INVENTION: NOVEL POTASSIUM CHANNEL MOLECULES AND USES THEREFOR
 ; FILE REFERENCE: NMI-055CP
 ; CURRENT APPLICATION NUMBER: US/09/358,383C
 ; PRIOR FILING DATE: 1999-07-21
 ; PRIOR APPLICATION NUMBER: USSN 09/119,855
 ; PRIOR FILING DATE: 1998-07-21
 ; NUMBER OF SEQ ID NOS: 36
 ; SOFTWARE: Patentin Ver. 2.0
 ; SEQ ID NO 22
 ; LENGTH: 319
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: domain
 ; US-09-358-383C-22

Query Match 13.4%; Score 402; DB 4; Length 319;
 Best Local Similarity 33.7%; Pred. No. 5e-32;
 Matches 101; Conservative 55; Mismatches 92; Indels 52; Gaps 10;

109 YVRTWSEFLDLASLMPDVTYVRLGPHF-----PTLRNLFRLRPLFAFPTERT-161
 1 YLKTWFLDLVLTLPDLIYIFFGSDGSGSLFPLRLNRLRLRVAELFRLKEDT-60
 162 AYRN-ARPLALMLYIFVTHMNSC-----LYFALSRY-----LGFGRDAMVYV--DP-206
 61 AFNYFAIRLILKVCVTLIIHNNACVFDILYILISDYDVAERYGFTDTWLYALANDF-120
 207 AQP-----GFERLRQVLYSFYFSTLLITVVG-DTPPARREEYLFWMGDFLLAVMG-257
 121 EEPISMTGIRGSPBLKXQYITSLWSITLITVVGDPAPVTREREKLFVIFDMLFVILL-180
 258 FATIMGSSSVIYNNMTADAIFYPDHALVKKYMKLQHVNRKLERVIDYQHQLNKK--K-315
 181 FAYIIGNTSIYVNNNSRTAEFRTMDAVKEFMKFRKLPKRLQERLAVLYFEYTWNSKSD-240
 316 MTNEVAIIQHLPERLRARVAVSVHLSTLSRVQIFONCEASLLEBLVLKLOPOTYSPGEYV-375
 241 GLDEEEVLEQLPKKRLAEI-----STLITLITIGGE-----MSPPTTSFEVY-281

RESULT 13

US-09-614-480-9
 ; Sequence 9, Application US/09614480
 ; Patent No. 6586179
 ; GENERAL INFORMATION:
 ; APPLICANT: Jegla, Timothy James
 ; APPLICANT: Liu, Yi
 ; APPLICANT: ICAGEN, Inc.
 ; TITLE OF INVENTION: Human Bag2

FILE REFERENCE: 018512-002310US
 ; CURRENT APPLICATION NUMBER: US/09/614,480
 ; CURRENT FILING DATE: 2000-05-29
 ; PRIOR APPLICATION NUMBER: US 60/143,467
 ; PRIOR FILING DATE: 1999-07-13
 ; NUMBER OF SEQ ID NOS: 9
 ; SOFTWARE: Patentin Ver. 2.1
 ; SEQ ID NO 9
 ; LENGTH: 962
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; OTHER INFORMATION: human ether a-go-go (Eag) 1 voltage-gated
 ; OTHER INFORMATION: potassium channel
 ; US-09-614-480-9

Query Match 13.1%; Score 391; DB 4; Length 962;
 Best Local Similarity 23.7%; Pred. No. 4.2e-30;
 Matches 143; Conservative 111; Mismatches 258; Indels 92; Gaps 22;

36 WNTWTFPVMYVLLIIVCRACFPDLOHGYLVAMLVLDYTSDDLVLDDMYVRFHTGFL-E-94
 222 WITLILTF--YVALLVPVNSFKTRQNM--VAMLVDSIVDVFIVLDIYVNFHTTGVG-276
 95 QGILVVDKGRISRYRTWSFPLDLASLMPDVTYV-----RIGPHTPTLRNRLRPL-148
 277 AGEVISPDKLIRNNYKLTW-FVIDLISCLPYDINAFENVDEGISLFSLSKTVRLRLTG-335
 149 RLEFAPDRTETRLRYNPAFRIALMLYIF-VIHHNSCYFALSRYGFGRD-----A-200
 336 RVARKLDHYLEYGA-----AVLVILVCVFLAAHMAACIWSIGDYIIFEDTKTINNS-390
 201 WYVY--DPAQP-----GFERLRQVLYSFYFSTLLITVVG-DTPPARREEY-244
 391 WLQVANDIGTPYQFNGSGSGKWEKGSYKSVIISLYFTMTSLTSGFGIARSTDIEX-450
 245 LEWYGFLLAVMGFATIMGSSSVIYNNMTADAIFYPDHALVKKYMKLQHVNRKLERVY-304
 451 IFVAIMMIGSLYATIFGVVTTIFQGVYANTRVHMLNSVDFLKLQVPKGLSERVM-510
 305 DWYQHLQINKMTNEVAIIQHLPERLRARVAVSVHLSTLSRVQIFONCEASLLEBLVYKL-364
 511 DYIVSTWMSRIGDITKVLQICPDMDRADICVHLNRKVFKEHPARLASDGLPALAMEF-570
 365 QPOTYSPGEYVCRKGDIGQEMVYIIRREGOLAVVADDTQYAVLGAQYFGEISITINIKN-424
 571 QTVHCAPEDDLTHAGESVDSLCFVYSGSLKVITQDDEV--AIIKGVDFGV--FWKE-624
 425 MSGNRRTANIKSLGSDLFCLSKEDREVLSEYPOQOTIMEKREIILKNN-----476
 625 ATLAGSCANVVALYCDLHVIRKDALQVLEFY--TAFSHSFERNILLITVNLKRIYVR-681
 477 KL-DVNAEAP-----IALQENTSRV-----RGDQQLDDLTQX-510
 682 KISDVKREERERMRKKNAPLILPPDHEVRRLPQRFQCKARLAAERG-GRDLDLVE-740
 511 FARLLAEBSGALKIYVIRLEWQREWP-MPEDLAEADDEGEPEFGTSKDEBRASOE-569
 741 KGNVITTEASANHSL--VQASVTVYRSPATPVSFOQASISGVVDH-AKLQARGSECL-795
 570 GPPG-573
 796 GPKG-799

RESULT 14

US-09-694-777A-3
 ; Sequence 3, Application US/09694777A
 ; Patent No. 6638736
 ; GENERAL INFORMATION:
 ; APPLICANT: PARDO-FERNANDEZ, LUIS ANGEL
 ; APPLICANT: STUMER, WALTER
 ; APPLICANT: BECKH, SYNNOVE

; APPLICANT: BRUGEMANN, ANDREA
 ; APPLICANT: FERNANDEZ-MIRANDA, DONATO DEL CAMINO
 ; APPLICANT: PEREZ, ARACELI SANCHEZ
 ; APPLICANT: WESELOH, RUDIGER
 ; TITLE OF INVENTION: NOVEL HUMAN K+ ION CHANNEL AND THERAPEUTIC APPLICATIONS
 ; FILE REFERENCE: MPG-8
 ; CURRENT APPLICATION NUMBER: US/09/694,777A
 ; PRIOR APPLICATION NUMBER: PCT/EP99/02695
 ; PRIOR FILING DATE: 1999-04-21
 ; PRIOR APPLICATION NUMBER: EP 98 10 7268.9
 ; PRIOR FILING DATE: 1998-04-21
 ; NUMBER OF SEQ ID NOS: 24
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 3
 ; LENGTH: 962
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-694-777A-3

Query Match 13.1%; Score 391; DB 4; Length 962;
 Best Local Similarity 23.7%; Pred. No. 4.2e-30;
 Matches 143; Conservative 111; Mismatches 258; Indels 92; Gaps 22;

QY 36 MWLNTWPPVYNNLILVCRACFPDQHGVLVAMLVLDYSDLLYLLDMVFRHTGFL-E 94
 DB 222 WIIILTF---YALIVPVVVSFKTRQNN--VAMLVDSIVDVIPLVDIYVINFHTTVGP 276
 QY 95 QGILVVDKGRISRYVWTSFPLDASIMPTDVVVY-----RLGHTPTLRRLRFRAP 148
 DB 277 AGEVISDPKILRMNYLKTW-FVIDLISCLPYDVINAFENYDEGISLSSLKVVRLRLG 335
 QY 149 RLFEAPDRTRTRAYPAFRIAKMLYIF-VVIHNSCLYFALSRYIGFGRD-----A 200
 DB 336 RVARKLDHYIEYGA-----AVLVILVCVFGIAAHMAACIYSGDYEIFEDTKTIRNS 390
 QY 201 WVPY---DPAQP-----GFERLRQYLYSFYSTLLITTVG-DTPPARREY 244
 DB 391 WLQLAMDIGTPQFNGSGSGKWEKGSKNVYISLYFTWSTLTSVGFNIA PSTDIEK 450
 QY 245 LFWAGDFLLAVMGFATIMSGSVIYNNMTADAFYPDHALYKVMKLOHVNKLEERY 304
 DB 451 IFVAIIMTIGSLIYATIFGNVTTFIQQMANTNRHYHMLNSVRDFKLTVGPXGLSERV 510
 QY 305 DWYQHLQIKKMTNEVALIQLPERLRAEVAVSVHLSSTLSRVOIFONCEASLLEELV 364
 DB 511 DYIVSTWMSRGIDTEKVIQICPKMRADICVHLNKRKVFKEHPAFRLASGCLRALAMEF 570
 QY 365 QPOTYSGEYVCRKGIQGEYTIIRREGOLAVVADGITQYAVLAGALYGEISIIINIKN 424
 DB 571 QTVHCAFGDLIYHAGESVDSLCEVVSGLFVIODDVV--ALIGKGVFDV----FWKE 624
 QY 425 MSGNRRITANKSLGYSDLFCLSKEDLREYLSYEPQAOITMEKRGREILKMN----- 476
 DB 625 ATIAOSCANVRALTYCDLHVIRKDALQKLEFY--TAFSHSFSRNLITLYNKRRIYER 681
 QY 477 KL-DYNAEAE-----IALQEAATESRL-----RGIDQDLDDLQTK 510
 DB 682 KISDVKREERERMRKNEAPLILPDPHVRRLFORRQCKEARLAERG-GRDLDDLDVE 740
 QY 511 FARLLAELESSALKIAYRIERLEWQTRMP-MPEDLAEDDGEPEEGTSKDEGRASGE 569
 DB 741 KGNVITHEASNHST---VKASVVTYRESPATPVSPQASTSGVDPH-AKLQAPGSBCL 795
 QY 570 GPPG 573
 DB 796 GPKG 799

RESULT 15
 US-09-694-777A-21
 ; Sequence 21, Application us/09694777A

; Patent No. 6638736
 ; GENERAL INFORMATION:
 ; APPLICANT: PARDO-FERNANDEZ, LUIS ANGEL
 ; APPLICANT: STUMMER, WALTER
 ; APPLICANT: BECKH, SYNOVE
 ; APPLICANT: BRUGEMANN, ANDREA
 ; APPLICANT: FERNANDEZ-MIRANDA, DONATO DEL CAMINO
 ; APPLICANT: PEREZ, ARACELI SANCHEZ
 ; APPLICANT: WESELOH, RUDIGER
 ; TITLE OF INVENTION: NOVEL HUMAN K+ ION CHANNEL AND THERAPEUTIC APPLICATIONS
 ; FILE REFERENCE: MPG-8
 ; CURRENT APPLICATION NUMBER: US/09/694,777A
 ; PRIOR APPLICATION NUMBER: PCT/EP99/02695
 ; PRIOR FILING DATE: 1999-04-21
 ; PRIOR APPLICATION NUMBER: EP 98 10 7268.9
 ; PRIOR FILING DATE: 1998-04-21
 ; NUMBER OF SEQ ID NOS: 24
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 21
 ; LENGTH: 960
 ; TYPE: PRT
 ; ORGANISM: Bovine sp.
 US-09-694-777A-21

Query Match 13.0%; Score 387.5; DB 4; Length 960;
 Best Local Similarity 24.9%; Pred. No. 9.5e-30;
 Matches 132; Conservative 101; Mismatches 226; Indels 71; Gaps 19;

QY 36 MWLNTWPPVYNNLILVCRACFPDQHGVLVAMLVLDYSDLLYLLDMVFRHTGFL-E 94
 DB 222 WIIILTF---YALIVPVVVSFKTRQNN--VAMLVDSIVDVIPLVDIYVINFHTTVGP 276
 QY 95 QGILVVDKGRISRYVWTSFPLDASIMPTDVVVY-----RLGHTPTLRRLRFRAP 148
 DB 277 AGEVISDPKILRMNYLKTW-FVIDLISCLPYDVINAFENYDEGISLSSLKVVRLRLG 335
 QY 149 RLFEAPDRTRTRAYPAFRIAKMLYIF-VVIHNSCLYFALSRYIGFGRD-----A 200
 DB 336 RVARKLDHYIEYGA-----AVLVILVCVFGIAAHMAACIYSGDYEIFEDTKTIRNS 390
 QY 201 WVPY---DPAQP-----GFERLRQYLYSFYSTLLITTVG-DTPPARREY 244
 DB 391 WLQLAMDIGTPQFNGSGSGKWEKGSKNVYISLYFTWSTLTSVGFNIA PSTDIEK 450
 QY 245 LFWAGDFLLAVMGFATIMSGSVIYNNMTADAFYPDHALYKVMKLOHVNKLEERY 304
 DB 451 IFVAIIMTIGSLIYATIFGNVTTFIQQMANTNRHYHMLNSVRDFKLTVGPXGLSERV 510
 QY 305 DWYQHLQIKKMTNEVALIQLPERLRAEVAVSVHLSSTLSRVOIFONCEASLLEELV 364
 DB 511 DYIVSTWMSRGIDTEKVIQICPKMRADICVHLNKRKVFKEHPAFRLASGCLRALAMEF 570
 QY 425 MSGNRRITANKSLGYSDLFCLSKEDLREYLSYEPQAOITMEKRGREILKMN----- 476
 DB 625 ATIAOSCANVRALTYCDLHVIRKDALQKLEFY--TAFSHSFSRNLITLYNKRRIYER 681
 QY 477 KL-DYNAEAEIALQEAATESRL-----RGIDQDLDDLQTKFARLAE 517
 DB 682 KISDVKREERERMRKNEAPLILPDPHVRRLFORRQCKEARLAE 728

Search completed: September 11, 2004, 01:14:12
 Job time : 106 secs

Blank

Sheet

QY 66 LeuValAlaTrpLeuValLeuAspTyrThrSerAspLeuLeuTyrLeuLeuAspMetVal 85
DB 193 ACCGCGCCTGGATCGTCTCAACGCTGTCTGGACACTTTCTCTCATGAGACTTGGT 252
QY 86 ValArgPheHisThrGlyPheLeu-----GluGlnGlyIleLeuValValAspLysGly 103
DB 253 TTGAACCTTCCGACCGGCAATTGTTATTGAGGACAACACGGAGATCATCTGGACCCCGAG 312
QY 104 ArgIleSerSerArgTyrValArgThrTrpSerPhePheLeuAspLeuAlaSerLeuMet 123
DB 313 AAGATAAAGAAGAACTACTTGGTACGTTGG---TTCTGGTGGACTTCTGTTGCATCCATC 369
QY 124 ProThrAspValValTyr----- 129
DB 370 CCGGTGGACTACATCTCTCATAGTGGAGGAAGGAATCGACTCGGAGTCTTACAAGACA 429
QY 130 -----ValArgLeuGlyProHisThrProThrLeuArgLeuAsnArgPheLeuArg 146
DB 430 GCGGTGCTCTGCGCATCTGCGCTTCCACAGATCTTCAGTCTGCTGCGGCTGCTGGG 489
QY 147 AlaProArgLeuPheGluAlaPheAspArgThrGlu-----ThrArgThr 161
DB 490 CTATCAACGCTCATCCGATATATCCACGAGTGGGAAGAGATTTCCACATGACCTACGAC 549
QY 162 AlaTyrProAsnAlaPheArgIleAlaLysLeuMetLeuTyrIlePheValValIleHis 181
DB 550 CTGGCAAGTGCAGTGCATCTGTAACCTGATCAGCATGATCTACTGCTCTGCGCAC 609
QY 182 TrpAsnSerCysLeuTyrPheAlaLeuSerArgTyrLeuGlyPheGlyArgAspAlaTrp 201
DB 610 TGGGACGTTGCTCGATCTCTGCTGCCCATCTGCTGCAAGACTTCCCGACGAGTCTGG 669
QY 202 ValTyrProAsnProAlaGlnProGlyPheGluArgLeuArgGlnGlnTyr-----Leu 219
DB 670 GTGTCATCAAC-----AACATGGTGAACCACTCGTGGAGCGAGCTC 711
QY 220 TyrSerPhe-----TyrPheSerThrLeuIleLeuThrThrValGlyAspThr 235
DB 712 TACTCGTTCGCGCTCTTCAAGGCCATGAGCCATCTGTGTCATCGGCTACGGCGGCGAG 771
QY 236 ProProAlaArgGluGluTyrLeuPheMetValGlyAspPheLeuLeuAlaVal 255
DB 772 GCGCGCGAGGATGACAGACATCTGGCTGACCATGCTC---AGCATGATCTAGCGGCC 828
QY 256 MetGlyPheAlaThrIleMetGlySerMetSerSerValIleTyrAsnMetAsnThrAla 275
DB 829 ACCTGCTATGCCATGTTATTGGCGACGCACTGGCGCTCATCCAGTCCCTGGATTCTGCA 888
QY 276 AspAlaAlaPheTyrProAspHisAlaLeuValLysLysTyrMetLysLeuGlnHisVal 295
DB 889 CGCGGCCAATACGAGGAGTACAAAGCAAGTAGACCAATCATGTCCTTCCACAAACATG 948
QY 296 AsnArgLysLeuGluArgValIleAspTrpTyrGlnHisLeuGlnIleAsnLysLys 315
DB 949 CCGGCTGACTTCCGCGAGAGATCCAGATTACTATGAACAC---CGGTACCAAGGGAAG 1005
QY 316 MetThrAsnGluValAlaIleLeuGlnHisLeuProGluArgLeuArgAlaGluValAla 335
DB 1006 ATGCTGTGATGAGACAGCATCTTGGGGAACCTCAACGGGCCACTGCGTGAGGAGATTGG 1065
QY 336 ValSerValHisLeuSerThrLeuSerArgValGlnIlePheGlnAsnCysGluAlaSer 355
DB 1066 AACTTCAACTCGCGGAGCTGGGTCTCCATCGCGCTGTTGCCAATCGACACCCCAAT 1125
QY 356 LeuLeuGluGluLeuValLeuLysLeuGlnProGlnThrTyrSerProGlyGluTyrVal 375
DB 1126 TTCGTACACGCCATGCTGACAAAGCTCAATTGAGTCTTCCAGCTCGAGATTACATC 1185
QY 376 CysArgLysGlyAspIleGlyGlnGluMetTyrIleArgGluGlnLeuAlaVal 395
DB 1186 ATCCGAGAGGGACCATCGGAGAGATGTACTTCCATCCAGCATCGGGTGGTGGCGGTG 1245

QY 396 ValAlaAspAspGlyIleThrGlnTyrAlaValLeuGlyAlaGlyLeuTyrPheGlyGlu 415
DB 1246 CTCACCAAGGC-----AACAGAGATGAGCTGTGGATGGCTCTTATTCGGGAG 1299
QY 416 IleSerIleIleAsnIleLysGlyAsnMetSerGlyAsnArgThrAlaAsnIleLys 435
DB 1300 ATCTGCTTG-----CTCACAGGGCGCGGTACGCGCAGCGTGGCA 1341
QY 436 SerLeuGlyTyrSerAspLeuPheCysLeuSerLysGluAspLeuArgGluValLeuSer 455
DB 1342 GCTGACACTACTGTCGCTCTACTCACTGAGTGGACAATTTCAACAGAGTGTCTGGAG 1401
QY 456 GluTyrProGlnAlaGlnThrIleMetGluGluLysGlyArgGluIleLeuLeuLysMet 475
DB 1402 GAATACCCCATGATCGCGCTGCTTGGACTGTGGCTATTGACCGGTAGATCGCAT 1461
QY 476 AsnLys 477
DB 1462 GGCAG 1467

RESULT 2

US-08-997-685A-9
; Sequence 9, Application US/08997685A
; Patent No. 6551821
; GENERAL INFORMATION:
; APPLICANT: The Trustees of Columbia University
; APPLICANT: Kandel, Eric
; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof
; FILE REFERENCE: 0575/54806
; CURRENT APPLICATION NUMBER: US/08/997,685A
; CURRENT FILING DATE: 1997-12-12
; NUMBER OF SEQ ID NOS: 60
; SOFTWARE: Patent version 3.1
; SEQ ID NO 9
; LENGTH: 2263
; TYPE: DNA
; ORGANISM: human
US-08-997-685A-9

Alignment Scores:
Pred. No.: 5,2e-43 Length: 2263
Score: 441.50 Matches: 120
Percent Similarity: 47.68% Conservative: 116
Best Local Similarity: 24.24% Mismatches: 202
Query Match: 14.77% Indels: 57
DB: 4 Gaps: 15

US-09-927-267-1 (1-575) x US-08-997-685A-9 (1-2263)

QY 26 ValLeuAspProSerGlyAspTyrTyrTrpTrpLeuAsnThrMetValPheProVal 45
DB 37 ATTATCCACCCCTTACAGTGATTTTACGGATTATTAATGCTCATATGATG 96
QY 46 MetTyrAsnLeuIleLeuValCysArgAlaCysPheProAspLeuGlnHisGlyTyr 65
DB 97 GTTGGAAATCTAGTCATCATCACAGTTCGATTCACATTC-----TTTACAGAGCAACA 150
QY 66 LeuValAlaTrpLeuValLeuAspTyrThrSerAspLeuLeuTyrLeuLeuAspMetVal 85
DB 151 ACAACACCATGATATTTCATGTCGATCAGATACAGATTTTCTTATTTGACCTGATC 210
QY 86 ValArgPheHisThrGlyPheLeu-----GluGlnGlyIleLeuValValAspLysGly 103
DB 211 ATGAATTTTAGGACTGGGACTGCTCAATGAGACAGTTCGAATCATCTCGACCCCAAA 270
QY 104 ArgIleSerSerArgTyrValArgThrTrpSerPhePheLeuAspLeuAlaSerLeuMet 123
DB 271 GTGATCAAGATCAATTAATTAAGAGCTGG---TTTGTGGTGAAGTCTCATCTCATCCATC 327
QY 124 ProThrAspValValTyr----- 129
DB 328 CCAGTGGATATATCTTCTTATTGTAGAAAAGGAATGATCTCGAAGTTTACAAGACA 387

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QY 130 -----ValArgLeuGlyProHisThrProThrLeuArgLeuAsnArgPheLeuArg 146
Db 388 GCAGGGCCCTTGGCATTGTGAGTTTACAAAATCTCAGTCTCTGGTTTATTACGA 447
QY 147 AlaProArgLeuPhe-----GluAlaPheAspArgThr---Glu 158
Db 448 CTTTCAAGGTTAATTAGATACATACATCAATGGGAAGAGATATTCACATGACATATGAT 507
QY 159 ThrArgThrAlaTyrProAsnAlaPheArgIleAlaLysLeuMetLeuTyrIlePheVal 178
Db 508 CTCGCCAGTGCAGTGTGAGATTTTAACTCATCGCATGATCGT-----CTC 558
QY 179 ValIleHisTrpAsnSerCysLeuTyrPheAlaLeuSerArgTyrLeuGlyPheGlyArg 198
Db 559 CTGTGCCACTGGATGGTGTCTTCAGTCTTAGTACCACACTAGTCAGGACTTCCACCA 618
QY 199 AspAlaTrpValTyrProAspProAlaGlnProGlyPheGluArgLeuArgGlnTyr 218
Db 619 GATTGCTGGTGTCTTTAAAT-----GAAATGGTTAATCATCTTTGGGAAAGCAGTAT 672
QY 219 LeuTyrSerPheTyr-----PheSerThrLeuIleLeuThrThrValGlyAspThrPro 236
Db 673 TCATAGCACTCTTCAAGCTATGAGTCATGCTGTGCAATGGGTATGGACCCCAAGCC 732
QY 237 ProProAlaArgGluGluTyrLeuPheMetValGlyAspPheLeuLeuAlaValMet 256
Db 733 CCAGTCAGCATCTCTGACCTCTGGATTACCATGCTG---AGCATGATCTCGGGGCCACC 789
QY 257 GlyPheAlaThrIleMetGlySerMetSerValIleTyrAsnMetAsnThrAlaAsp 276
Db 790 TGCTATGCCATGTTTGTTCGGCCATGCCACCGCTTTAATCCAGTCTCTGATCTCTCGAGG 849
QY 277 AlaAlaPheTyrProAspHisAlaLeuValLysTyrMetLysLeuGlnHisValAsn 296
Db 850 CGGCAGTATCAGAGAAGTATAGCAAGTGGAACTATCATCATCTCAATCAAGTATACCA 909
QY 297 ArgLysLeuGluArgValIleAspTrpTyrGlnHisLeuGlnIleAsnLysLysMet 316
Db 910 GCTGATATCGCGCAGAGATACATCATCTACTATGACAC---AGATACCAAGCAAAATC 966
QY 317 ThrAsnGluValAlaIleLeuGlnHisLeuProGluArgLeuArgAlaGluValAlaVal 336
Db 967 TTTGATAGGAATAATTTCTCAATGAATCAATGATCTCTCAGAGAGAGATAGTCAAC 1026
QY 337 SerValHisLeuSerThrLeuSerArgValGlnIlePheGlnAsnCysGluAlaSerLeu 356
Db 1027 TTCAACTCTCGAACTCGTGGTACAAATGCTTTATTTGCTAATGCGGATCCCTAATTTT 1086
QY 357 LeuGluGluLeuValLeuLysLeuGlnProGlnThrTyrSerProGlyGluTyrValCys 376
Db 1087 GTGACTGCCATGCTGAGCAAGTTGAGATTGAGGTGTTTCAACCTGGAGATTATATCAT 1146
QY 377 ArgLysGlyAspIleGlyGlnGluMetTyrIleLeuArgGluGlyGlnLeuAlaValVal 396
Db 1147 CGAAGAGGCGCGTGGGTAAATAATGATTTTCAATCAACACGGGTGTGCTGCTCAT 1206
QY 397 AlaAspAspGlyIleTyrGlnTyrAlaValLeuGlyAlaGlyLeuTyrPheGlyGluIle 416
Db 1207 ACAAAATCC-----AGTAAAGAAATGAGCTGACAGATGCTCTTACTTTGGAGAGATT 1260
QY 417 SerIleIleAsnIleLysGlyAsnMetSerGlyAsnArgArgThrAlaAsnIleLysSer 436
Db 1261 TGCCTGTGACC---AAAGGA-----CGTCGTACTGCCAGTGTTCGAGCT 1302
QY 437 LeuGlyTyrSerAspLeuPheCysLeuSerLysGluAspLeuArgGluValLeuSerGlu 456
Db 1303 GATACATATTCTGCTCTTTACTACTTTCCGTGGACAAATTTCAACAGAGTCTCTCGAGAA 1362
QY 457 TyrProGlnAlaGlnThrIleMetGluGlu-----466
Db 1363 TATCAATGATGAGAGAGCCTTTGAGACAGTGTGCCATGTGACCGACTAGATCGAATAGGA 1422
QY 467 LysGlyArgGluIleLeuLeuLysMetAsnLysLeuAspValAsn 481
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Db 1423 AGAAAAAATTCATTTCTCTGCAAAAGTTCCAGAGGATCTGAAC 1467
RESULT 3
US-08-997-685A-1
; Sequence 1, Application US/08997685A
; Patent No. 6551821
; GENERAL INFORMATION:
; APPLICANT: The Trustees of Columbia University
; APPLICANT: Kandel, Eric
; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof
; FILE REFERENCE: 0575/54806
; CURRENT APPLICATION NUMBER: US/08/997,685A
; CURRENT FILING DATE: 1997-12-12
; NUMBER OF SEQ ID NOS: 60
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 2733
; TYPE: DNA
; ORGANISM: mouse
US-08-997-685A-1
Alignment Scores:
Pred. No.: 7,2e-43 Length: 2733
Score: 441.50 Matches: 134
Percent Similarity: 44.8% Conservative: 124
Best Local Similarity: 23.30% Mismatches: 227
Query Match: 14.77% Indels: 91
DB: 4 Gaps: 17
US-09-927-267-1 (1-575) x US-08-997-685A-1 (1-2733)
QY 26 ValLeuAspProSerGlyAspTyrTyrTrpTrpLeuAsnThrMetValPheProVal 45
Db 367 ATTATCCATCCGTACAGTGACTTTCAGGTTTATTGGGATTTAATCATGCTTATAATGAG 426
QY 46 MetTyrAsnLeuIleIleLeuValCysArgAlaCysPheProAspLeuGlnHisGlyTyr 65
Db 427 GTTGAATAATTTGGTCATCATACCATCCAGTTGGAATCATCGTTTC-----TTCACAGAGCAGAG 480
QY 66 LeuValAlaTrpLeuValLeuAspTyrThrSerAspLeuLeuTyrLeuLeuAspMetVal 85
Db 481 ACAACACCGCTGGATTATTTTCAACGTGCATCCGATACGTGTTTCTCTGTGACTTAATC 540
QY 86 ValArgPheHisThrGlyPheLeu-----GluGlnGlyIleLeuValValAspLysGly 103
Db 541 ATGAATTTTAGGACTGGGACTGTCAATGAAGACAGCTCGGAAATCATCTGGACCCCTAAA 600
QY 104 ArgIleSerSerArgTyrValArgThrTrpSerPhePheLeuAspLeuAlaSerLeuMet 123
Db 601 GTGATCAAGATGAATTAATTTAAAGAGCTGG---TTTGGTGGGACTTCATCTCATCGATC 657
QY 124 ProThrAspValValTyr-----129
Db 658 CCGGTGGATTATCTTCTCATTTAGAGAAAGGATGGACTCAGAAATTACAGACA 717
QY 130 -----ValArgLeuGlyProHisThrProThrLeuArgLeuAsnArgPheLeuArg 146
Db 718 GCCAGAGCACTTCGTATCGTGAGGTTTACAAAATTTCTCAGTCTCTTGGCGTTATTACGC 777
QY 147 AlaProArgLeuPhe-----GluAlaPheAspArgThr---Glu 158
Db 778 CTTTCAAGGTTAATCAGATACATACACAGTGGGAAGAGATATTCCATGACATGAC 837
QY 159 ThrArgThrAlaTyrProAsnAlaPheArgIleAlaLysLeuMetLeuTyrIlePheVal 178
Db 838 CTCGCCAGTGTGTGGTGGAGATCTTCAACCTCATTTGGCAATGATCTG-----CTT 888
QY 179 ValIleHisTrpAsnSerCysLeuTyrPheAlaLeuSerArgTyrLeuGlyPheGlyArg 198
Db 889 CTGTGCCACTGGGATGGTGTCTTCAAGTCTCTGCTTCCCTGCTGCTGAGGACTTCCACCA 948
QY 199 AspAlaTrpValTyrProAspProAlaGlnProGlyPheGluArgLeuArgGlnTyr 218
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Db 761 GTG-----TCCATCAATGCGTGTGAACCACTCGTGGAGTGAACCTGCTACCTCC 808
Qy 222 Phe-----TyrPheSerThrLeuLeuLeuThrValGlyAspThrProPro 237
Db 809 TTCGACATCTCAAGGCCATGAGCCACATGCTGTGCATCGGGTACGGCGGAGCGGCC 868
Qy 238 ProAlaArgGluGluGluThrLeuLeuLeuValMetGly 257
Db 869 GAAAGCATGACGACATCTGGCTGACCATGCTC---AGCATGATGTGGTGCACCTGC 925
Qy 258 PheAlaThrIleMetGlySerMetSerValIleTyrAsnMetAsnThrAlaAspAla 277
Db 926 TACGCCATGTTCTCGGCCACGCCACTGCTCCCTCATCCAGTCTGCTGCTCCTCCGCGGCGC 985
Qy 278 AlaPheTyrProAspHisAlaLeuValLysLysTyrMetLysLeuGlnHisValAsnArg 297
Db 986 CAGTACACGAGGAAGTCAAGCAGGTGGAGCATGATGCTCCACCAAGCTGCCAGCT 1045
Qy 298 LysLeuGluArgValIleAspTyrPheGlnHisLeuGlnIleAsnLysLysMetThr 317
Db 1046 GACITTCGCCAGAGATCCACGACTACTATGACAC---CGTACACGGGCAAGATGTT 1102
Qy 318 AsnGluValAlaIleLeuGlnHisLeuProGluArgLeuAlaGluValAlaValSer 337
Db 1103 GACGAGGACAGCATCTCGGCGAGCTCAACGGGCCCTCGCGGAGAGATCGTCAACTTC 1162
Qy 338 ValHisLeuSerThrLeuSerArgValGlnIlePheGlnAsnCysGluAlaSerLeuLeu 357
Db 1163 AACTGCCGAGAGCTGTGGCTTCCATGCGCTGTTCGCCAACCGCGACCCCAACTTCGTC 1222
Qy 358 GluGluLeuValLeuLeuGlnProGlnThrTyrSerProGlyGluTyrValCysArg 377
Db 1223 ACGGCCATGCTGACCAAGCTCAAGTTCGAGCTTCACGCGGGTGACTATCATCTCCG 1282
Qy 378 LysGlyAspIleGlyGlnGluMetTyrIleLeuArgGluGlyGlnLeuAlaValAla 397
Db 1283 GAAAGCACCACCGGAGAGATGACTTCATCCAGCAGCGGTGTCAGCGGTGCTCACT 1342
Qy 398 AspAspGlyIleThrGlnTyrAlaValLeuGlyAlaGlyLeuTyrPheGlyGluIleSer 417
Db 1343 AAGGCG-----ACAAGAGATGAGCTGTCCGATGCTCTCTCTCCGGGAGATCTGC 1396
Qy 418 IleIleAsnIleLysGlyAsnMetSerGlyAsnArgArgThrAlaAsnIleLysSerLeu 437
Db 1397 CTG-----CTCACCAGCGGCGCCGACGCGGAC-GTCCGGGCTGAC 1437
Qy 438 GlyTyrSerAspLeuPheCysLeuSerLysGluAspLeuArgGluValLeuSerGluTyr 457
Db 1438 ACCTACTGCCGCTCTATTCCTGAGCGTGACAACTTCAACGAAAGTCTGGAGAGTAC 1497
Qy 458 ProGlnAlaGlnThrIleMetGluGlu-----lys 467
Db 1498 CCCATGATGCGCGGCTTTCGAGAGGTGGCCATCGACCCCTGGACCGCATCGGCAAG 1557
Qy 468 GlyArgGluLeuLeuLysMetAsnLysLeuAspValAsnAla 482
Db 1558 AAGAAATCCATCTCTCTGACACAGGTGCGAGCATGACCTCACTCACTCG 1602

RESULT 5
US-09-694-777A-20
; Sequence 20, Application US/09694777A
; Patent No. 6638736
; GENERAL INFORMATION:
; APPLICANT: PARDO-FERNANDEZ, LUIS ANGEL
; APPLICANT: STUMMER, WALTER
; APPLICANT: BECKH, SYNNOVE
; APPLICANT: BRUGGMANN, ANDREA
; APPLICANT: FERNANDEZ-MIRANDA, DONATO DEL CAMINO
; APPLICANT: PEREZ, ARACELI SANCHEZ
; APPLICANT: WESELOH, RUDIGER
; TITLE OF INVENTION: NOVEL HUMAN K+ ION CHANNEL AND THERAPEUTIC APPLICATIONS
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: MPG-8

; CURRENT APPLICATION NUMBER: US/09/694,777A
; CURRENT FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: PCT/EP99/02695
; PRIOR FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: EP 98 10 7268.9
; PRIOR FILING DATE: 1998-04-21
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 20
; LENGTH: 3041
; TYPE: DNA
; ORGANISM: Rattus sp.
US-09-694-777A-20

Alignment Scores:
Pred. No.: 9,78e-38 Length: 3041
Score: 400.00 Matches: 148
Percent Similarity: 43.85% Conservative: 123
Best Local Similarity: 23.95% Mismatches: 256
Query Match: 13.38% Indels: 92
DB: 4 Gaps: 22

US-09-927-267-1 (1-575) x US-09-694-777A-20 (1-3041)

Qy 11 GluSerSerProProAlaProSerLysAlaArgLysLeuLeuProValLeuAspProSer 30
Db 625 CAGACATCTCTCCCGAGTACAGCAAGAGCGCCAAAGACACCCCTC-----ACA 675
Qy 31 GlyAspTyrTyrTyr-----Tyr-----TyrLeuAsnThrMetValPhe 43
Db 676 TCATCTTACAC-TACTGTGTCTTTAAGACCACATCGGATGTGATC-----ATCTGTATC 728
Qy 44 ProValMetTyrAsnLeuLeuLeuValCysArgAlaCysPheProAspLeuGlnHis 63
Db 729 CTGACCTTCTACACAGCCATCTCTGTCTCTTACACGCTCTCTTTAAACACGAGCAGAAT 788
Qy 64 GlyTyrLeuValAlaTyrLeuValLeuAspTyrThrSerAspLeuLeuTyrLeuLeuAsp 83
Db 789 AAC-----GTGGCTGTGCTGTGTGACACATCGTGGATGATCATCTTTTGTGTGAC 842
Qy 84 MetValValArgPheHisThrGlyPheLeu---GluGlnGlyIleLeuValValAspLys 102
Db 843 ATTGCTTGAATTTTCACACCATCTTGTGGGCGAGCGGGAGATCTCTGACCCC 902
Qy 103 GlyArgIleSerSerArgTyrValArgThrTrpSerPhePheLeuAspLeuAlaSerLeu 122
Db 903 AAATTTATCCGCATGAACACTACCTGAAGACGTGG---TTTGTGATCGACCTTCTCTCTGT 959
Qy 123 MetProThrAspValValTyrVal-----ArgLeuGlyProHisThr 136
Db 960 TTGCATATGACGTCATCAACGCTTTTGAGAACGTGGATGAGGCATCAGCAGCTGTTC 1019
Qy 137 ProThrLeuArgLeuAsnArgPheLeuAlaProArgLeuPheGluAlaPheAspArg 156
Db 1020 AGTTCTCTGAAGTGTGCGGCTCTCGTCTCGACAGTGGCGCCCAAGCTGACCAT 1079
Qy 157 ThrGluThrArgThrAlaTyrProAsnAlaPheArgIleAlaLysLeuMetLeuTyrIle 176
Db 1080 TATATCGATGACGAGCGG-----GCGGTACTGTGCTCTGTGTGTGCGTG 1124
Qy 177 Phe---ValValIleHisTyrAsnSerCysLeuTyrPheAlaLeuSerArgTyrLeuGly 195
Db 1125 TTGGGCTGTGCTGCCACTGGCTGATGCTGTGTACAGCATTTGGGATTATGATC 1184
Qy 196 PheGlyArgAsp-----AlaTyrValTyrPro-----Asp 205
Db 1185 TTTGATGAAGACCAAGACCATCCGCTAACACAGCTGGCTCTACCAACTGGCATTCGAC 1244
Qy 206 ProAlaGlnPro-----GlyPheGluArg 213
Db 1245 ATTGGCACTCCATACCATGTTTAAATGGTCTGTTCGGGGAAGTGGGAGCGGGCCCAAGC 1304
Qy 214 LeuArgArgGlnTyrLeuTyrSerPheTyrPheSerThrLeuLeuLeuThrValGly 233

Db 1305 AAGAACTCCGATACATTCCTCGCTGCTACCTGACATGCAAGTCTCACCAGTGTGGC 1364
Qy 234 ---AspThrProProAlaArgGluGluTyrLeuPheMetValGlyAspPheLeu 252
Db 1365 TTGTGTAACATCGCCCATCCACAGATCGAAGATCTTCGCGTAGCCATCATGATG 1424
Qy 253 LeuAlaValMetGlyPheAlaThrIleMetGlySerMetSerSerValIleTyrAsnMet 272
Db 1425 ATTGCTCCCTCTCTATGCCACCATCTTTGGGAATGTGAGACCATTTCCAGCAGATG 1484
Qy 273 AsnThrAlaAspAlaAlaPheTyrProAspHisAlaLeuValLysTyrMetLysLeu 292
Db 1485 TATGCCAACACCAAGATATCATGAGATGCTCAACAGCTCCGGATTTCTGAGATC 1544
Qy 293 GlnHisValAsnArgLysLeuGluArgValIleAspTyrTyrGlnHisLeuGlnIle 312
Db 1545 TACCAGGTGCCAAGGGCTGAGCGGCTCATGGACTACATTTGTGTACTCGGTCC 1604
Qy 313 AsnLysLysMetThrAsnGluValAlaIleLeuGlnHisLeuProGluArgLeuArgAla 332
Db 1605 ATGTCCCGCGCATCGACGAGAGGTCTGCAAAATCTGCCCAAGACATGCGAGCT 1664
Qy 333 GluValAlaValSerValHisLeuSerThrLeuSerArgValGlnIlePheGlnAsnCys 352
Db 1665 GACATTCGTACACTGACCCGAAAGTGTCAAGAACACCCCGCTTCGCGTGGCC 1724
Qy 353 GluAlaSerLeuLeuGluGluValLeuLysLeuGlnProGlnThrTyrSerProGly 372
Db 1725 AGCGATGTTGCTGAGGSCCTTGCCATGGAGTTCACAGACATACACTGCGCCCGAGG 1784
Qy 373 GluTyrValCysArgLysGlyAspIleGlyGlnGluMetTyrIleIleArgGluGln 392
Db 1785 GACCTCATCTATCACCGCGGAGAGTGTGGACCGCTCTGCTGCTGCTCGCGGTCC 1844
Qy 393 LeuAlaValAlaAspGlyIleThrGlnTyrAlaValLeuGlyAlaGlyLeuTyr 412
Db 1845 CTGGAGGTGATCCAGATGATGAGGTGGT-----GCCATCTAGGGAAGAGATGTG 1898
Qy 413 PheGlyGluIleSerIleIleAsnIleLysGlyAsnMetSerGlyAsnArgThrAla 432
Db 1899 TTGTGGGATGTT-----TTCTGGAAGGAGGTACCTCTGACAGTCTCGCTG 1946
Qy 433 AsnIleLysSerLeuGlyTyrSerAspLeuPheCysLeuSerLysGluAspLeuArgGlu 452
Db 1947 AATGTCCGCGCTTGACCTACTGTGACCTGCGAGTGTCAAGAGGATCCCTCGCAGAA 2006
Qy 453 ValLeuSerGluTyrProGlnAlaGlnThrIleMetGluGluLysGlyArgGluIleLeu 472
Db 2007 GTGCTAGAATCTAC-----ACAGCTTCTCCACTCTCTCCCGGAACCTGATT 2057
Qy 473 LeuLysMetAsp-----LysLeuAspValAsnAlaGluAlaAlaGluIleAlaLeuGln 490
Db 2058 CTCACCTCAATCTGAGGAAGAGGATTTGTTCGGAAGATCAGCAGCATGTAACAGAA 2117
Qy 491 GluAlaThrGluSerArgLeuArg-GlyLeuAspGlnGlnLeuAspAspLeuThrIle 510
Db 2118 GAA-----GAGGAGGATGAACCGA-----AGAACGAGGCCCCC 2153
Qy 510 sPheAlaArgLeuLeuAlaGluLeuGluSerSerAlaLeuLysIleAlaTyrArgIleG 530
Db 2154 CTATCTCTGCTCTGACCACTCTGTCAGAGGCTCTTCCAAAGGTTCGCCAGCAGAA 2213
Qy 530 uArgLeuGluTyrGlnThrArgGlu-TyrProMetPro-GluAspLeuAlaGluAlaAsp 549
Db 2214 GAAGCCAGGCTGCGCAGAGAGGTGGCGGACCTGGATGACCTG-----2261
Qy 550 AspGluGlyGluProGluGlyThrSerLysAspGluGlyArgAlaSer-----567
Db 2262 -----GATGTAGAGAGGGAATGCCCTCAGCGACCATACCTCAGCCACACAGC 2312
Qy 568 -----GlnGluGlyProProGlyPro 574
Db 2312 -----ArgLeuGlyProHisThrProThr 138
Db 954 TATGACGTCAACAGCTTTTGAAGAGTGTGATGAGGGCATCATGAGCGCTGTTCACTCT 1013

Db 2313 CTGTTGAAGCCAGTGTGTTCAAGTGTGTTGAGAGTCCCGCAGCGCT 2360

RESULT 6
US-09-694-777A-19
; Sequence 19, Application US/09694777A
; Patent No. 6638736
; GENERAL INFORMATION:
; APPLICANT: PARDO-FERNANDEZ, LUIS ANGEL
; APPLICANT: STUHRER, WALTER
; APPLICANT: BECKH, SYNNOVE
; APPLICANT: BRUGEMANN, ANDREA
; APPLICANT: FERNANDEZ-MIRANDA, DONATO DEL CAMINO
; APPLICANT: PEREZ, ARACELI SANCHEZ
; APPLICANT: WESLOH, RUDIGER
; TITLE OF INVENTION: NOVEL HUMAN K+ ION CHANNEL AND THERAPEUTIC APPLICATIONS
; FILE REFERENCE: MPG-8
; CURRENT APPLICATION NUMBER: US/09/694,777A
; CURRENT FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: PCT/EP99/02695
; PRIOR FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: EP 98 10 7268.9
; PRIOR FILING DATE: 1998-04-21
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 19
; LENGTH: 3041
; TYPE: DNA
; ORGANISM: Bovine sp.
US-09-694-777A-19

Alignment Scores:
Pred. No.: 1,138-37 Length: 3041
Score: 399.50 Matches: 165
Percent Similarity: 39.17% Conservative: 119
Best Local Similarity: 22.76% Mismatches: 263
Query Match: 13.37% Indels: 180
DB: 4 Gaps: 30

US-09-927-267-1 (1-575) x US-09-694-777A-19 (1-3041)

Qy 6 LysValLysThrThrGluSerPro-----14
Db 559 AAGCGGAGACGCTCCACAGCACTCCCGTCTGGCGAGGTTCTGCAGCTGGGCTCAGACA 618
Qy 15 -----ProAlaProSerLysAlaArgLysLeuProValLeuAspProSerGlyAsp 32
Db 619 TCTTTCCTCCAGTACCAAGCAAGAGGACCAAGACTCCCT-----CGCACATCATCT 669
Qy 33 TyrTyrTyr-----Tyr-----TyrLeuAsnThrMetValPheProVal 45
Db 670 TACAC-TACTGCGTTTAAAGACACGCTGGGACTGGATC-----ATCTGATCTTAACC 722
Qy 46 MetTyrAsnLeuIleIleLeuValCysArgAlaCysPheProAspLeuGlnHisGlyTyr 65
Db 723 TTTACACAGCCATCTGTTCTTACACAGCTCTCTTTAAAAACAGGAGCAACAAAC--- 779
Qy 66 LeuValAlaTyrLeuValLeuAspTyrThrSerAspLeuLeuTyrLeuLeuAspMetVal 85
Db 780 ---GTGGCTGCTGCTGTTGTGACAGCATCGGGATGTCATTTTGTGTGACATGTG 836
Qy 86 ValArgPheHisThrGlyPheLeu---GluGlnGlyIleLeuValValAspLysGlyArg 104
Db 837 CTGAATTTTACACCACTTTTGTGGACCGCTGGGAGGTGATTTCTGACCCCAACATC 896
Qy 105 IleSerSerArgTyrValArgThrTyrPhePheLeuAspLeuAlaSerLeuMetPro 124
Db 897 ATTGCGATCACTACCTGAAGACGTGG---TTTGTGATTGACCTTCTGCTCTGTTGCC 953
Qy 125 ThrAspValValTyrVal-----ArgLeuGlyProHisThrProThr 138
Db 954 TATGACGTCAACAGCTTTTGAAGAGTGTGATGAGGGCATCATGAGCGCTGTTCACTCT 1013

Pred. No.:	3.16e-37	Length:	2886
Score:	395.50	Matches:	151
Percent Similarity:	42.30%	Conservative:	118
Best Local Similarity:	23.74%	Mismatches:	266
Query Match:	13.23%	Gaps:	102
DB:	4		25
US-09-927-267-1 (1-575) x US-09-694-777A-13 (1-2886)			
Qy	11	GlusSerSerProAlaProSerLysAlaAArgLysLeuLeuProValLeuAspProSer	30
Db	575	CAAGATCCCTCCCGATACAGCAAGCAGCACCACCAAGACTCCCCCTC-----ACA	625
Qy	31	GlyAspTyrTyrTyr-----Trr-----TrrPheAsnThrMetValPhe	43
Db	626	TCATCTTACAT-TATTGTGTTTTTAAGCACCATGGGATTGGATC-----ATCTTGATC	678
Qy	44	ProValMetTyrAsnLeuLeuLeuValCysArgAlaCysPheProAspLeuGlnHis	63
Db	679	TTGACCTTCATACAGCAGCTCTGGTCCCTTAATATGCTCTCTTCAAAACAGGCAGAT	738
Qy	64	GlyTyrLeuValAlaTrrPheValLeuAspTyrThrSerAspLeuLeuTyrLeuAsp	83
Db	739	AAT-----GTGGCTGGCTGTTGTGTAGATCGTGGATGTTATCTTTTTTGGTCGAC	792
Qy	84	MetValValArgPheHisThrGlyPheLeu---GluGlnGlyLeuLeuValValAspLys	102
Db	793	ATTGTGCTCAATTTTCATACACCTTTGTGGACAGCAGGGAGGTGATTTCTGACCCC	852
Qy	103	GlyArgIleSerSerArgTyrValArgThrTrpSerPhePheLeuAspIleAlaSerLeu	122
Db	853	AAACTTATCCGATGAACACTACCTGAAGACGTGG---TTTGATGATGACCTTCTGCTGT	909
Qy	123	MetProThrAspValValTyrVal-----ArgLeuGlyProHisThr	136
Db	910	TTGCCATATGATGTCATCAACGCTTTTGAGACGTGGATGAGGCATCAGACCTGCTTC	969
Qy	137	ProThrLeuArgLeuAsnArgPheLeuArgAlaProArgLeuPheGluAlaPheAspArg	156
Db	970	AGCTCTCTAAAAGTTGTCGCGCTCTCGCTCTTGGGGCGAGTGGCCCGTAAGCTGGACCAC	1029
Qy	157	ThrGluThrArgThrAlaTyrProAsnAlaPheArgIleAlaLysLeuMetLeuTyrIle	176
Db	1030	TACATTGAATATGGAGCT-----GCTGTGTGGTCTCTGCTGGTGTGGTG	1074
Qy	177	Phe---ValValIleHisTrpAsnSerCysLeuTyrPheAlaLeuSerArgTyrLeuGly	195
Db	1075	TTTGGGCTGGCTGCACACTGATGGCCTGCATCTGTGTACAGCATTTGGGACTATGAGATC	1134
Qy	196	PheGlyArgAsp-----AlaTrpValTyrPro-----Asp	205
Db	1135	TTTGACGAGGACACCAAGACAATCCGCAACACAGCTGGCTGTACCAACTAGCGATGGAC	1194
Qy	206	ProAlaGlnPro-----GlyPheGluArg	213
Db	1195	ATTGGCACCCCTTACCAAGTTAATGGGTCTGGCTCAGGAGTGGGAGGTGGTCCAGC	1254
Qy	214	LeuArgArgGlnTyrLeuTyrSerPheTyrPheSerThrLeuLeuLeuThrThrValGly	233
Db	1255	AAGAATCTTGCTACATCTCTCGTTTATTTTACAAATGACCAAGCTTCACAGTGTGGGC	1314
Qy	234	--AspThrProProProAlaArgGluGluTyrLeuPheMetValGlyAspPheLeu	252
Db	1315	TTTGGGAACATCGCCCCATCCAGACATTGAGAAGATCTTTGCAGTGGCCATCATGATG	1374
Qy	253	LeuAlaValMetGlyPheAlaThrIleMetGlySerMetSerSerValIleTyrAsnMet	272
Db	1375	ATTGGCTCACTTCTATATGCCACCATCTTCGGGAATGTGACGACTATTTTCCACAGATG	1434
Qy	273	AsnThrAlaAspAlaAlaPheTyrProAspHisAlaLeuValLysTyrMetLysLeu	292
Db	1435	TATGCCAACACCAACAGATACCATGAGATGCTCAACAGTGTTCGGGACTTTCCTCAAGCTC	1494

Qy 293 GlnHisValAsnArgLysLeuGluArgValIleAspTrpTyrGlnHisLeuGlnIle 312
Db 1495 TACCAGGTGCCAAAGGATTGAGTGAAGCAGTAAATGCGATTATATGTTGTCCACTTGGTCC 1554
Qy 313 AsnLysLysMetThrAsnGluValAlaIleLeuGlnHisLeuProGluArgLeuArgAla 332
Db 1555 ATGTCCAGAGGCATTGACACAGAGAAGTCTCTGCAGATCTGCCCCCAAGGACATCAGAGACC 1614
Qy 333 GluValAlaValSerValHisLeuSerThrLeuSerArgValGlnIlePheGlnAsnCys 352
Db 1615 GACATCTGCGTGCACCTGAACCCCAAGGTGTTCAAGGAGCACCGCGCTTCCCGCTGGCC 1674
Qy 353 GluAlaSerLeuLeuGluGluLeuValLeuLysLeuGlnProGlnThrTyrSerProGly 372
Db 1675 AGTGATGCGTCCCTCCGGCAGCTGGCCATCGAGATTCCAGACGGTGCACCTGTGCCCCAGGG 1734
Qy 373 GluTyrValCysArgLysGlyAspIleGlyGlnGluMetTyrIleIleArgGluGlyGln 392
Db 1735 GACCTCATCTACCATGCAGGAGAGCGTTGACAGCCTCTGCTTGTGTTTCTGGCTCC 1794
Qy 393 LeuAlaValValAlaAspAspGlyIleThrGlnTyrAlaValleuGlyAlaGlyLeuTyr 412
Db 1795 CTGAGGTGATCCAAGATGATGAGTGGTG-----GCCATTCTAGAAAGAGACGACGTG 1848
Qy 413 PheGlyGluIleSerIleIleAsnIleLysGlyAsnMetSerGlyAsnArgThrAla 432
Db 1849 TTTGGAGATGTG-----TTCTGGAAGAGACCACTCTGCCAGTCTCTGTGCC 1896
Qy 433 AsnIleLysSerLeuGlyTyrSerAspLeuPheCysLeuSerLysGluAspLeuArgGlu 452
Db 1897 AATCTTAGGCGCTTGACCTACTGTGATCTGCATGTGATCAAGCGGATGCCCTGCAGAAA 1956
Qy 453 ValLeuSerGluTyrProGlnAlaGlnThrIleMetCluLulysGlyArgGluIleLeu 472
Db 1957 GTGCTGGAATCTCAC-----ACGCGCTTCTCCCATTCCTTCTCCCGGAACCTGATT 2007
Qy 473 LeuLysMetAsn-----LysLeu---AspValAsnAlaGlu 483
Db 2008 CTGACGTACAACTTTGAGGAAGAGGATTGTGTTCCGGAAGATCAGCGATGTGAAACGTGAA 2067
Qy 484 AlaAlaGlu----- 486
Db 2068 GAGGAAGACCGCATGAACAGAAAGATGAGGCCCCCTGATCTTGCCCCCGGACCACT 2127
Qy 487 -----IleAlaLeuGlnGluAlaThrGluSerArgLeu-----Arg 498
Db 2128 GTCCGGCGCTCTTCCAGAGATTCCGACACAGAAAGAGCGCAGGTGGCAGCTGAGAGA 2187
Qy 499 GlyLeuAspGlnGlnLeuAspLeuGlnThrLysPheAlaArgLeuLeuAlaGluLeu 518
Db 2188 GGG---GGCCGGACCTTGGATGACCTAGATGTGGAGAAAGGCAATGTCTTACAGAGCAT 2244
Qy 519 GluSerSerAlaLeuLysIleAlaTyrArgIleGluArgLeuGluTyrGlnThrArgGlu 538
Db 2245 GCCTCCGCCCAACACACGCTC-----GTGAAGCCAGCGTGTCCACGTGCGGTGAG 2295
Qy 539 TrpPro---MetProGluAspLeuAlaGluAlaAspAspGluGlyGluProGluGluGly 557
Db 2296 AGTCTGCCACGCGCGTATCTTCCAGGCAGCTCCACCTCCGGGGTGCAGACCAAC--- 2352
Qy 558 ThrSerLysAspGluGluGlyArgAlaSerGlnGluGlyProGly 573
Db 2353 ---GCAAAAGCTACAGGCCCGCAGGTCCGAGTGCCTGGGCCCAAGGGG 2397

RESULT 8
US-09-694-777A-1
; Sequence 1, Application US/0969477A
; Patent No. 6638736
; GENERAL INFORMATION:
; APPLICANT: PARDO-FERNANDEZ, LUIS ANGEL
; APPLICANT: STÜHMER, WALTER
; APPLICANT: BECKH, SYNNOVE
; APPLICANT: BRUGEMANN, ANDREA

Qy	206	ProAlaGlnPro-----	-----GlyPheGluArg	213
Db	1231	ATTGGCACCCCTTACCAGTTTAATGGGTCTGGCTCAGGAAAGTGGGAGGTGGTCCCGCAGC	1290	
Qy	214	LeuArgArgGlnTyrLeuTyrSerPheTyrPheSerThrLeuLeuLeuThrThrValGly	233	
Db	1291	AAGAAATCTCTGTCTACATCTCTCGTTGTGTAATTTTCACAATGACCAAGCCTCCACCACTGTGGC	1350	
Qy	234	--AspThrProProAlaArgGluGluGluTyrLeuPheMetValGlyAspPheLeu	252	
Db	1351	TTTGGGAACATCGCCCATCCACAGACATGAGAAGATCTTGCAGTGGCCATCATGATG	1410	
Qy	253	LeuAlaValMetGlyPheAlaThrIleMetGlySerMetSerSerValIleTyrAsnMet	272	
Db	1411	ATTGGCTCACTTCTATGCCACCATCTTCGGGAATGTGACGACTATTTTCCACAGATG	1470	
Qy	273	AsnThrAlaAspAlaAlaPheTyrProAspHisAlaLeuValLysLysTyrMetLysLeu	292	
Db	1471	TATGCCAACACCAACAGATACCATGATGCTCAACAGTGTTCGGGACTTCTCTGAAGCTC	1530	
Qy	293	GlnHisValAsnArgLysLeuGluArgValIleAspTrpTyrGlnHisLeuGlnIle	312	
Db	1531	TACCAGTGCCTGCGGCAAAAGATTTGACGTGACGAGTAAATGGATTTATGTGTCCACTTGGTCC	1590	
Qy	313	AsnLysLysMetThrAsnGluValAlaIleLeuGlnHisLeuProGluArgLeuArgAla	332	
Db	1591	ATGTCAGAGGCATTGACACAGAGAAGGTCCTGCAGATCTGCCCAAGGACATGAGAGCC	1650	
Qy	333	GluValAlaValSerValHisLeuSerThrLeuSerArgValGlnIlePheGlnAsnCys	352	
Db	1651	GACATCTGCGTGACCTGAACCGCAAGGTGTTCAAGGAGCACCCGCGCTTTCGGCTGGCC	1710	
Qy	353	GluAlaSerLeuLeuGluGluLeuValLeuLysLeuGlnProGlnThrTyrSerProGly	372	
Db	1711	AGTGATGGCTGCCCTCGCGCACTGGCCCATGGAGTTCCAGACGGTGCAGCTGTGCCCGAGGG	1770	
Qy	373	GluTyrValCysArgLysGlyAspIleGlyGlnGluMetTyrIleIleArgGluGlyGln	392	
Db	1771	GACCTCATCTACATGACGAGAGAGCGTTGACAGCCTCTGCTTGTGGTTTCTGGCTCC	1830	
Qy	393	LeuAlaValValAlaAspAspGlyIleThrGlnTyrAlaValLeuGlyAlaGlyLeuTyr	412	
Db	1831	CTGAGGTGATCCCAAGATGATGAGGTGGT-----GCCATTCTAGAAAGGAGACGCTG	1884	
Qy	413	PheGlyGluIleSerIleIleAlaIleLysGlyAsnMetSerGlyAsnArgArgThrAla	432	
Db	1885	TTTGGAGATGTG-----TTCTGGAAGGAAGCCACCTTGCACGCTCCTGTGCC	1932	
Qy	433	AsnIleLysSerLeuGlyTyrSerAspLeuPheCysLeuSerLysGluAspLeuArgGlu	452	
Db	1933	AATGTTAGGCGCTTGACCTACTGTGATGTGATGTGATCAAGCGGATGCCCTGCGAGAA	1992	
Qy	453	ValLeuSerGluTyrProGlnAlaGlnThrIleMetGluGluLysGlyArgGluIleLeu	472	
Db	1993	GTGCTGGAATTTCTAC-----ACGGCCTTCTCCATTCTCTCCCGGAACCTGAT	2043	
Qy	473	LeuLysMetAsn-----LysLeu---AspValAsnAlaGlu	483	
Db	2044	CTGACGTACAACCTTGAGGAAGAGGATTGTGTTCCGGAAGATCAGCGATGTGAACCTGAA	2103	
Qy	484	AlaAlaGlu-----	486	
Db	2104	GAGGAAGAAGCGATGAACGAAGAATGAGGCCCCCTGTATCTTGCCCCCGGACCACT	2163	
Qy	487	-----IleAlaLeuGlnGluAlaThrGluSerArgLeu-----Arg	498	
Db	2164	GTCCGCGCCTCTTCCAGAGATTCCGACAGCAAGAAGCGCCAGGCTGCGACCTGAGAGA	2223	
Qy	499	GlyLeuAspGlnGlnLeuAspLeuGlnThrLysPheAlaArgLeuLeuAlaGluLeu	518	
Db	2224	GGG---GGCGCGGACCTGTCATCACCTAGATGTGGAGAAGGGCAATGTCTCTTACAGAGCAT	2280	


```

; SEQ ID NO 6
; LENGTH: 2967
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-162-012-6

Alignment Scores:
Pred. No.: 1,78e-36 Length: 2967
Score: 389.50 Matches: 138
Percent Similarity: 42.71% Conservative: 108
Best Local Similarity: 23.96% Mismatches: 250
Query Match: 13.03% Indels: 80
DB: 4 Gaps: 20

US-09-927-267-1 (1-575) x US-10-162-012-6 (1-2967)
Qy 36 TrpTrpLeuAsnThrMetValPheProValMetTyrAsnLeuLeuLeuValCysArg 55
Db 655 TGGGTGATTTTAAATCTTACCTTC-----TACACCGCCATTATGTTCTTATAAT 705
Qy 56 AlaCysPheProAspLeuGlnHisGlyTyrLeuValAlaTrpLeuValLeuAspTyrThr 75
Db 706 GTTTCCTTCAAAACAAAGCAGCAAC-----ATAGCCTGGCTGTACTCGATAGTGTG 759
Qy 76 SerAspLeuTyrLeuLeuAspMetValValArgPheHisThrGlyPheLeuGluGln 95
Db 760 GTGGACGTTATTTTCTGGTTGACATGCTTTTAAATTTTACACGACTTTCGTGGGCCC 819
Qy 96 GlyIleLeuValVal---AspLysGlyArgIleSerSerArgTyrValArgThrTrpSer 114
Db 820 GGTGGAGAGGTCAATTCTGACCTTAAGCTCATAGGATGAACATATCTGAAACCTGG-- 876
Qy 115 PhePheLeuAspLeuAlaSerLeuMetProThrAspValValTyrVal----- 130
Db 877 TTTGTGATCGATCTGCTCTTTTACCTTATGACATCATCAANGCCTTTGAAAGATGTG 936
Qy 131 -----ArgLeuGlyProHisThrProThrLeuArgLeuAsnArgPheLeuAlaPro 148
Db 937 GATGAGGGAATCAGCAGTCTTTCAGTCTTTTAAAGTGGTGGCTCTTACGACTGGGC 996
Qy 149 ArgLeuPheGluAlaPheAspArgThrGluThrArgThrAlaTyrProAsnAlaPheArg 168
Db 997 CGTGTGCTAGGAAACTGGACCATTTACTAGAAATATGGAGCA-----GCA 1041
Qy 169 IleAlaLysLeuMetLeuTyrIlePhe---ValIleHisTrpAsnSerCysLeuTyr 187
Db 1042 GTCCTCGTCTCGTGGTGTGTTTGGACTGGTGGCCCACTGGCTGGCTGCATATGG 1101
Qy 188 PheAlaLeuSerArgTyrLeuGlyPheGlyArg-----AspAla 200
Db 1102 TATAGCATCGAGACTAGAGGTCAATTGATGAAGTCACTAACACCATCCAAATAGACAGT 1161
Qy 201 TrpValTyrPro-----AspProAlaGln----- 208
Db 1162 TGGCTCTACAGCTGGCTTTTGGACATTTGGGACTCCATATCGCTACAATACCGAGTGGG 1221
Qy 209 -----ProGlyPheGluArgLeuArgGlnTyrLeuTyrSerPheTyr 223
Db 1222 ATATGGGAAGGAGGAGCCAGCAGGATTCATTG-----TACGTGTCTCTCTCTCTAC 1272
Qy 224 PheSerThrLeuIleLeuThrValGly---AspThrProProAlaArgGluGlu 242
Db 1273 TTTACCATGACAGCCCTTACACCATAGGATTTGGAAACATAGCTCTTACCAGATGTG 1332
Qy 243 GluTyrLeuPheMetValGlyAspPheLeuAlaValMetGlyPheAlaThrIleMet 262
Db 1333 GAGAAGATGTTTTCGGTGGCTATGATGATGTTGGCTCTCTCTTATGCAACTATTTT 1392
Qy 263 GlySerMetSerSerValIleTyrAsnMetAsnThrAlaAspAlaPheTyrProAsp 282
Db 1393 GGAATGTTACACAAATTTTCCAGCAATTTTCCAGCAATTTTCCAGCAATTTTCCAGATG 1452
Qy 283 HisAlaLeuValLysLysTyrMetLysLeuGlnHisValAsnArgLysLeuGluArg 302
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RESULT 10

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US-10-162-012-6
; Sequence 6, Application US/10162012
; Patent No. 6682597
; GENERAL INFORMATION:
; APPLICANT: Curtis, Rory A.J.
; APPLICANT: Silos-Santiago, Inmaculada
; APPLICANT: Gu, Wei
; TITLE OF INVENTION: NOVEL HUMAN ION CHANNEL AND TRANSPORTER FAMILY MEMBERS
; FILE REFERENCE: 10448-190001
; CURRENT APPLICATION NUMBER: US/10162,012
; CURRENT FILING DATE: 2002-06-04
; PRIOR APPLICATION NUMBER: US 60/209,845
; PRIOR FILING DATE: 2000-06-06
; PRIOR APPLICATION NUMBER: US 09/875,321
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: PCT/US01/18340
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/209,257
; PRIOR FILING DATE: 2000-06-05
; PRIOR APPLICATION NUMBER: US 09/875,423
; PRIOR FILING DATE: 2001-06-05
; PRIOR APPLICATION NUMBER: PCT/US01/18398
; PRIOR FILING DATE: 2001-06-05
; PRIOR APPLICATION NUMBER: US 60/209,238
; PRIOR FILING DATE: 2000-06-05
; PRIOR APPLICATION NUMBER: US 09/875,363
; PRIOR FILING DATE: 2001-06-05
; PRIOR APPLICATION NUMBER: PCT/US01/18247
; PRIOR FILING DATE: 2001-06-05
; PRIOR APPLICATION NUMBER: US 60/227,068
; PRIOR FILING DATE: 2000-08-22
; PRIOR APPLICATION NUMBER: US 09/928,530
; PRIOR FILING DATE: 2001-08-13
; PRIOR APPLICATION NUMBER: PCT/US01/25475
; PRIOR FILING DATE: 2001-08-15
; PRIOR APPLICATION NUMBER: US 60/226,770
; PRIOR FILING DATE: 2000-08-21
; PRIOR APPLICATION NUMBER: US 09/934,421
; PRIOR FILING DATE: 2001-08-21
; PRIOR APPLICATION NUMBER: PCT/US01/26096
; PRIOR FILING DATE: 2001-08-21
; PRIOR APPLICATION NUMBER: US 60/279,281
; PRIOR FILING DATE: 2001-03-28
; PRIOR APPLICATION NUMBER: US 10/109,029
; PRIOR FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: PCT/US02/09728
; PRIOR FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: US 60/290,288
; PRIOR FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: US (not assigned)
; PRIOR FILING DATE: 2002-05-13
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: FastSeq for Windows Version 4.0
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Db 1453 CTGAATATGACGGAGCTTCTTAAACTCTATCAGTCCCAAGAGCCTTAGTGAGCGA 1512
Qy 303 VallyeAspTyrGlnHisLeuGlnleAsnLysMetThrAsnGluValalale 322
Db 1513 GTCATGATTAATTTGTCACATGCTCCATGTCACAAAGGCAATGATACAGAAAGGTC 1572
Qy 323 LeuGlnHisLeuProGluArgLeuArgAlaGluValAlaValSerValHisLeuSerThr 342
Db 1573 CTCCTCATCTGTCCCAAGAGATGAGAGCTGATATCTGTGTCTATCAACCCGGAAGGTT 1632
Qy 343 LeuSerArgValGlnIlePheGlnAsnCysGluAlaSerLeuLeuGluGluValLeu 362
Db 1633 TTTAATGAACATCTGCTTTTCGATGTCGCCAGCATGGTGTCTGCGCCCTTGGCGTA 1692
Qy 363 LysLeuGlnProGlnThrTyrSerProGluGluTyrValCysArgLysGlyAspIleGly 382
Db 1693 GAGTTCACCAACATTCACCTGTGCTCCCGGACCTCAATTTACCATGCTGGAGAAAGTGTG 1752
Qy 383 GlnGluMetTyrIleIleArgGluGlnLeuAlaValAlaValAlaAspGlyIleThr 402
Db 1753 GATGCCCTCTGCTTGTGTGTCAGATCCTTGGAAAGTCATCCAGGATGATGAGTGTGTG 1812
Qy 403 GlnTyrAlaValLeuGlyAlaGlyLeuTyrPheGlyGluIleSerIleIleAsnIleLys 422
Db 1813 -----GCTATTTAGGAAGGTCATGATTTTGGAGATC-----TTCTGG 1854
Qy 423 GlyAsnMetSerGlyAsnArgThrAlaAsnIleLysSerLeuGlyTyrSerAspLeu 442
Db 1855 AAGAAACACCCCTTCCCATGTCATGTCGCAACCTCCGGGACCTGACGTACTGTGACCTA 1914
Qy 443 PheCysLeuSerLysGluAspLeuArgGluValLeuSerGluTyrProGlnAlaGlnThr 462
Db 1915 CACATCATCAAGCGGAGAGCTTGTCTCAAGATCCTGGAAGTCTTGGACTTTAT-----ACAGCT 1965
Qy 463 IleMetGluGluLysGlyArgGluIleLeuLeuLysMetAsn-----LysLeuAspVal 480
Db 1966 TTTCGAAACTCTTCTCAAGAACTCTCACTCTTCTGCAATCTGAGGAACGGATCATC 2025
Qy 481 AsnAlaGluAlaAlaGluIleAlaLeuGlnGluAlaThrGluSerArgLeuArgGlyLeu 500
Db 2026 TTTCGTAAGATCAGTCATGATGTGAAGAAAGAGAG-----GAGGAGCGCTCCGG----- 2073
Qy 501 AspGlnGlnLeuAspLeuGlnThrLysPheAlaArgLeuLeuAlaGluLeuGluSer 520
Db 2074 -----CAGAGAAATGAGGTGACCTCAGCATTCCTCGTGAGCAC 2112
Qy 521 SerAlaLeuLysIleAlaTyrArgIleGluArgLeuGluThrGlnThrArgGluTrpPro 540
Db 2113 CCAGTCAGAAAGCTCTCCAGAGTTCAAGCAG----- 2145
Qy 541 MetProGluAspLeuAlaGluAlaAspAspGluGluProGluGluGluThrSerLys 560
Db 2146 CAGAGGAGCTCGGAATCAGGGCTCAACAGGGTGACCTCGCTGAGAGG---AACCACATC 2202
Qy 561 AspGluGluGlyArgAlaSerGlnGluGly-ProProGlyProGlu 575
Db 2203 CAGGTAGAGAGCGCTCTTACAGATGAGAACCTCCATCACCAGAA 2248
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RESULT 11

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US-10-162-012-4
; Sequence 4, Application US/10162012
; Patent No. 6682597
; GENERAL INFORMATION:
; APPLICANT: Curtis, Rory A.J.
; APPLICANT: Silos-Santiago, Inmaculada
; APPLICANT: Gu, Wei
; TITLE OF INVENTION: NOVEL HUMAN ION CHANNEL AND TRANSPORTER FAMILY MEMBERS
; FILE REFERENCE: 10448-19001
; CURRENT APPLICATION NUMBER: US/10/162,012
; CURRENT FILING DATE: 2002-06-04
; PRIOR APPLICATION NUMBER: US 60/209,845
; PRIOR FILING DATE: 2000-06-06
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Alignment Scores:

Pred. No.:	2,43e-36	Length:	3553
Score:	389.50	Matches:	138
Percent Similarity:	42.71%	Conservative:	108
Best Local Similarity:	23.96%	Mismatches:	250
Query Match:	13.03%	Indels:	80
DB:	4	Gaps:	20

US-09-927-267-1 (1-575) x US-10-162-012-4 (1-3553)

Qy 36 TrpTrpLeuAsnThrMetValPheProValMetTyrAsnLeuIleLeuValCysArg 55
|||
|||
932 TGGGTGATTTTAAATCTTACCTTC-----TACACCGCATATGTTCTTATAAT 982
|||
Qy 56 AlaCysPheProAspLeuGlnHisGlyTyrLeuValAlaThrLeuValLeuAspTyrThr 75
|||
|||
983 GTTTCCTTCAAAACAAAGCAGACAAC-----ATAGCCTGGCTGCTAGTAGTGTG 1036
|||
Qy 76 SerAspLeuLeuTyrLeuLeuAspMetValValArgPheHisThrGlyPheLeuGluGln 95
|||
|||
1037 GTGACGTTATTTTCTGTTGATCATGTTTAAATTTTACACGACTTTCTGGGGGCC 1096
|||
Qy 96 GlyIleLeuValVal---AspLysGlyArgIleSerSerArgTyrValArgThrTrpSer 114
|||
|||

Db	1097	GGTGGAGAGTCA	TTCTGTGACCCCTAAAGCTCATAAAGTAGAAC	TATCTGAAAACTTGG	---	1155
Qy	115	PhePheLeuAspLeuAlaSerLeuMetProThrAspValValTyrVal	-----	-----	-----	130
Db	1154	TTTGTGATCGATCTGCTGTCTGT	TTTACCTTATGCATCATCATCAT	GCTTTGAAATGTG	1213	
Qy	131	-----ArgLeuGlyProHisThrProThrLeuArgLeuAsnArgPheLeuArgAlaPro	148			
Db	1214	GATGAGGGAATCAGACGCTCTT	CAGTCTTTTAAAGATGGTGGCTCTT	TACGACTGGC	1273	
Qy	149	ArgLeuPheGluAlaPheAspArgThrGluThrArgThrAlaTyrProAsnAlaPheArg	168			
Db	1274	CGTGTGCTAGGAACCTGGACCAT	TACTAGAAATATGGAGCA	-----GCA	1318	
Qy	169	IleAlaIysLeuMetLeuTyrIlePhe	---ValValIleHisTipAsnSerCysLeuTyr	187		
Db	1319	GTCTCTGCTCCTGGTGTGTGT	TTTGGACTGTGGCCCACTGGCTGGCTGCATATGG	1378		
Qy	188	PheAlaLeuSerArgTyrLeuGlyPheGlyArg	-----AspAla	200		
Db	1379	TATAGCATCGAGACTACGAGTCA	TGATGAAGTCACTAACACCATCCAAATAGACAGT	1438		
Qy	201	TipValTyrPro	-----AspProAlaGln	-----	208	
Db	1439	TGGCTCTACCA	CGCTGTTGAGCATTTGGGACTCCATATGCTACAAATACACGAGTCTGGG	1498		
Qy	209	-----ProGlyPheGluArgLeuArgGlnTyrLeuTyrSerPheTyr	223			
Db	1499	ATATGGGAAGGAGACCCAGCAAGATT	CATTG	-----TACGTGCTCTCTCTAC	1549	
Qy	224	PheSerThrLeuIleLeuThrThrValGly	---AspThrProProAlaArgGluGlu	242		
Db	1550	TTTACCATGACAAGCCTTACAACCATAGGATT	TTGGAAACATAGTCTCTACCACAGATGTG	1609		
Qy	243	GluTyrLeuPheMetValGlyAspPheLeuLeuAlaValMetGlyPheAlaThrIleMet	262			
Db	1610	GAGAAGATGTTTCGGTGGCTATGATAGTGGTCTCTCTTTT	TTCGAACTATTTTT	1669		
Qy	263	GlySerMetSerSerValIleTyrAsnMetAsnThrAlaAspAlaAlaPheTyrProAsp	282			
Db	1670	GGAAATGTTACAACAATTTCCACAAATG	TATGCCAACCAACCATACCATGAGATG	1729		
Qy	283	HisAlaLeuValIysTyrMetLysLeuGlnHisValAsnArgLysLeuGluArgArg	302			
Db	1730	CTGAATAATGTACGGGACTTCTCTAAA	ACTCTATCAGGTCCCAAAAGGCCTTAGTGAGCGA	1789		
Qy	303	ValIleAspTyrTyrGlnHisLeuGlnIleAsnLysLysMetThrAsnGluValAlaIle	322			
Db	1790	GTCATGATTATATTGTCTCAACATG	TGTCCTCAAAAGCATGTGACAGAAAAGCT	1849		
Qy	323	LeuGlnHisLeuProGluArgLeuArgAlaGluValAlaValSerValHisLeuSerThr	342			
Db	1850	CTCTCCATCTGTCCCAAGGACATGAGAGTGATATCTGT	TTCATCTAAACCGGAAGGTT	1909		
Qy	343	LeuSerArgValGlnIlePheGlnAsnCysGluAlaSerLeuLeuGluGluLeuValLeu	362			
Db	1910	TTTAAATGAACATCTGCTTTTCGAT	TGGCCAGCATGGTGTCTCGCGCCCTTGGCGTA	1969		
Qy	363	LysLeuGlnProGlnThrTyrSerProGlyGluTyrValCysArgLysGlyAspIleGly	382			
Db	1970	GAGTTCCAAACCATTCATCTGTGCTCCCGGGACCTCAT	TTTACCATGTGTGAGAAAGTGTG	2029		
Qy	383	GlnGluMetTyrIleIleArgGluGluGlnLeuAlaValAlaAspAspGlyIleThr	402			
Db	2030	GATGCCCTCTCTTGTGTGTCTAGGATCCT	TGGAAAGTCATCCAGGATGATGAGGTGGT	2099		
Qy	403	GlnTyrAlaValLeuGlyAlaGlyLeuTyrPheGlyGluIleSerIleIleAsnIleLys	422			
Db	2090	-----GCTATTTTAGGGAAGGTCATG	TATTTGGAGATC	-----TTCTGG	2131	
Qy	423	GlyAsnMetSerGlyAsnArgThrAlaAsnIleLysSerLeuGlyTyrSerAspLeu	442			
Db	2132	AAGAAACACCCCTGCCATGTCATGTGCGAACGTCCGGGACATGACGTACTGTGACCTA	2191			

RESULT 12

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US-09-694-777A-14
; Sequence 14, Application US/09694777A
; Patent No. 6638736
; GENERAL INFORMATION:
; APPLICANT: PARDO-FERNANDEZ, LUIS ANGEL
; APPLICANT: STUHMER, WALTER
; APPLICANT: BECKH, SYNNOVE
; APPLICANT: BRUGGEMANN, ANDREA
; APPLICANT: FERNANDEZ-MIRANDA, DONATO DEL CAMINO
; APPLICANT: PEREZ, ARACELI SANCHEZ
; APPLICANT: WESELOH, RUDIGER
; TITLE OF INVENTION: NOVEL HUMAN K+ ION CHANNEL AND THERAPEUTIC APPLICATIONS
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: MPG-8
; CURRENT APPLICATION NUMBER: US/09/694,777A
; CURRENT FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: PCT/EP99/02695
; PRIOR FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: EP 98 10 7268.9
; PRIOR FILING DATE: 1998-04-21
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 14
; LENGTH: 2967
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-694-777A-14

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Alignment Scores:	
Pred. No.:	6.28e-36
Score:	385.00
Length:	2967
Matches:	152
Percent Similarity:	40.72%
Conservative:	118
Best Local Similarity:	22.93%
Mismatches:	265
Query Match:	129
Indels:	12.88%
DB:	4
Gaps:	26

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US-09-927-267-1 (1-575) x US-09-694-777A-14 (1-2967)

Qy 11 GluSerSerProAlaProSerLeuAlaArgLysLeuLeuProValLeuAspProSer 30
      :::::|||||:::
Db 575 CAGATCCTCTCCCGCTACAAGCAAGAGCGCACCAAGACGTCCTCTC-----ACA 625
Qv 31 GluAspTrpTrpTyr-----Tyr-----TyrLeuAsnThrMetValPhe 43

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; CURRENT APPLICATION NUMBER: US/09/694,777A
; CURRENT FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: PCT/EP99/02695
; PRIOR FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: EP 98 10 7268.9
; PRIOR FILING DATE: 1998-04-21
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 3083
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-694-777A-2

Alignment Scores:
Pred. NO.: 6.72e-36 Length: 3083
Score: 385.00 Matches: 152
Percent Similarity: 40.72% Conservative: 118
Best Local Similarity: 22.93% Mismatches: 265
Query Match: 12.88% Indels: 129
DB: 4 Gaps: 26

US-09-927-267-1 (1-575) x US-09-694-777A-2 (1-3083)

QY 11 GluSerProProAlaProSerLysAlaArgLysLeuProValLeuAspProSer 30
DB 611 CAGACATCTTCCCGAGTACAGCAGAGGACCAAGACATCCCCCTC-----ACA 661
QY 31 GlyAspTyrTyr-----Trr-----TrrLeuValValValValValVal 43
DB 662 TCATCTTACAT-TATTGTGTTTTTAAGACCACGTTGGGATTGGATC-----ATCTGTATC 714
QY 44 ProValMetTyrAsnLeuLeuLeuValCysArgAlaCysPheProAspLeuGlnHis 63
DB 715 TTGACCTTCTATACAGGCATCTTGGTCCCTTATAATGTCTCTCTCAAAACACGAGCAGAA 774
QY 64 GlyTyrLeuValAlaTrrLeuValLeuAspTyrTrrSerAspLeuTyrLeuLeuAsp 83
DB 775 AAT-----GTGGCTGCTGCTGTTGTATAGCATCGTGGATGTTATCTTTTGTGGAC 828
QY 84 MetValValArgPheHisThrGlyPheLeu---GluGlnGlyIleLeuValValAla 102
DB 829 ATTGTGCTCAATTTTCATACACCTTGTGGACACGAGGAGGAGTATCTTGACCCC 888
QY 103 GlyArgIleSerArgTyrValArgThrTrrSerPhePheLeuAspLeuAlaSerLeu 122
DB 889 AAACCTTATCCGCATGAACCTACCTGAAGACGTGG---TTTGTGATTGACCTTCTGCTGT 945
QY 123 MetProThrAspValVal-----Trr-----Trr-----Trr----- 128
DB 946 TTGGCATATGATGATCAACGCTTTTTCAGACGTGGATGAGTTAGTGCCTTTATGGGT 1005
QY 129 -----TrrValArgLeuGlyProHisThrPro-----Trr----- 137
DB 1006 GATCCAGGAAGATTGGTTTGTGATCAGATTCCACCACTGAGGGGAGAGAGAGT 1065
QY 138 -----ThrLeuArgLeuAsnArgPheLeuArgAlaProArg 149
DB 1066 CAGGGCATCAGACGCTGTTTCAGCTCTCTAAAGTTGTCCGGCTGCTCCGCTTTGGGCGA 1125
QY 150 LeuPheGluAlaPheAspThrGluThrArgThrAlaTyrProAsnAlaPheArgIle 169
DB 1126 GTGGCCGTAGCTGGACCACTACATTGAATATGGAGCT-----GCTGTG 1170
QY 170 AlaLysLeuMetLeuTyrIlePhe---ValValIleHisTrrAsnSerCysLeuPhe 188
DB 1171 CTGTCTCTGCTGGTGTGTGTGGCTGCTGCACACTGATGCTGCTGCTGCTGCTGCTGCTG 1230
QY 189 AlaLeuSerArgTyrLeuGlyPheGlyArgAsp-----AlaTrr 201
DB 1231 AGCATTTGGGACTATGAGATCTTTGACGAGGACCAACAGCAATCCGCAACACAGCTGG 1290
QY 202 ValTyrPro-----AspProAlaGlnPro-----Trr----- 209

Db 1291 CTGTACCAACTAGCATGGACATTTGGCACCCTTACCATTTAATGGTCTGGCTCAGG 1350
QY 210 -----GlyPheGluArgLeuArgGlnTyrLeuTyrSerPheTyrPheSerThr 226
DB 1351 AAGTGGGAAGGTGGTCCAGCAAGATTCTGTCTACATCTCTCTGTTGTTTACCAATG 1410
QY 227 LeuIleLeuThrThrValGly---AspThrProProAlaArgGluGluGluTyrLeu 245
DB 1411 ACCAGCTCTACCATGTTGGGCTTTGGGAACATCCCCCATCCACAGCATTTGAGAATC 1470
QY 246 PheMetValGlyAspPheLeuAlaValMetGlyPheAlaThrIleMetGlySerMet 265
DB 1471 TTTGAGTGGCCATCATGATGGTCTCTCTATGCCACATCTCTCGGAATGTG 1530
QY 266 SerSerValIleTyrAsnMetAsnThrAlaAspAlaPheTyrProAspHisAlaLeu 285
DB 1531 ACGACTATTTTCCAAACAGATGTATGCCAACACCAACAGATACCATGAGATGCTCAACAGT 1590
QY 286 ValLysLysTyrMetLysLeuGlnHisValAsnArgLysLeuGluArgArgValIleAsp 305
DB 1591 GTTCGGGACTTCTTGAAGCTCTACCGGTGCCAAAGGATTGAGTGACGCGAGTAATGGAT 1650
QY 306 TrrTyrGlnHisLeuGlnIleAsnLysLysMetThrAsnGluValAlaIleLeuGlnHis 325
DB 1651 TATATTGTGTCCTTGGTCCATGTCAGAGGCATTGCACAGAGAGGTCTCTGCAGATC 1710
QY 326 LeuProGluArgLeuArgAlaGluAlaValSerValHisLeuSerThrLeuSerArg 345
DB 1711 TGCCCCAAGACATGAGAGCGACATCTGCGTGCACCTGAAACCGCAAGGTCTCAAGGAG 1770
QY 346 ValGlnIlePheGlnAsnCysGluAlaSerLeuLeuGluGluValLeuLysLeuGln 365
DB 1771 CACCGGCTTCCGCTGGCCAGTGTGGTCTCCGCGCCTGGCCATGGCCATGGATTCAG 1830
QY 366 ProGlnThrTyrSerProGlyGluTyrValCysArgLysGlyAspIleGlyGlnGluMet 385
DB 1831 ACGGTGACATGTCGCCACGAGGACCTCATCTACCATGAGAGAGAGGTTGACGCTC 1890
QY 386 TyrIleIleArgGluGlnLeuAlaValAlaAspAspGlyIleThrGlnTyrAla 405
DB 1891 TGTCTTGTGGTTTCTGGCTCCCTGGAGTGTATCCCAAGATGATGAGTGGTG-----GCC 1944
QY 406 ValLeuGlyAlaGlyLeuTyrPheGlyGluIleSerIleIleAsnIleLysGlyAsnMet 425
DB 1945 ATCTAGGAAAAGGAGACGTGTTTGGAGATGTG-----TTCTGGAAGGAAGCC 1992
QY 426 SerGlyAsnArgThrAlaAsnIleLysSerLeuGlyTyrSerAspLeuPheCysLeu 445
DB 1993 ACCCTTCCCGAGTCTGTCGCAATGTTAGGCTTGTACCTACTGTGATCTGCATGTGATC 2052
QY 446 SerLysGluAspLeuArgGluValLeuSerGluTyrProGlnAlaGlnThrIleMetGlu 465
DB 2053 AAGCGGATGCTGTCAGAAAGTCTGGAATTCATC-----ACGGCTTCTCCCAT 2103
QY 466 GluLysGlyArgGluIleLeuLeuLysMetAsn-----Lys 477
DB 2104 TCCTTCTCCCGGAACCTGATTTCTGACGTACACTTGGAGAGAGATTGTGTTCCGGAAG 2163
QY 478 Leu---AspValAsnAlaGluAlaAlaGlu-----Trr----- 486
DB 2164 ATCAGCATGTGAACCTGAGAGAGAAACGATGAACAGAAAGATAGGCCCTCCCTG 2223
QY 487 -----IleAlaLeuGlnGluAlaThrGlu 494
DB 2224 ATCTTGGCCCGGACCACTGTCGCGCTCTTCCAGAGATTCCGACAGACAGAAAGAG 2283
QY 495 SerArgLeu-----ArgGlyLeuAspGlnGlnLeuAspLeuGlnThrLysPhe 511
DB 2284 GCCAGGTGGCAGCTGAGAGAGGG-----GGCCGGGACCTGGATGACCTAGATGTGGAAG 2340
QY 512 AlaArgLeuAlaGluLeuGluSerSerAlaLeuLysIleAlaTyrArgIleGluArg 531
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Db	2341	GGCAATGTCCTTACAGAGCANGCCTCGCCAAACACAGCCTC-----GTGAAGGCC	2391
Qy	532	LeuGluTrpGlnThrArgGluTrpPro---MetProGluAspLeuAlaGluAlaAspAsp	550
Db	2392	AGCGTGTACCCGTGCGTGAGATCTGCCACGCCCGTATCCTTCACAGGCAGCCTCCACC	2451
Qy	551	GluGlyGluProGluGluGlyThrSerLysAspGluGlyArgAlaSerGlnGluGly	570
Db	2452	TCCGGGGTGCAGACCAC-----GCAAGCTACAGGCCCAGGGTCGGAGTCCCTGGGC	2505
Qy	571	ProProGly	573
Db	2506	CCCAAGGGG	2514

RESULT 14

RES001.14
US-09-600-776-9
; Sequence 9, Application US/09600776
; Patent No. 6326168
; GENERAL INFORMATION:
; APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.
; TITLE OF INVENTION: A novel potassium channel protein
; FILE REFERENCE: Y9903-PCT
; CURRENT APPLICATION NUMBER: US/09/600,776
; CURRENT FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: JP P1998-011434
; PRIOR FILING DATE: 1998-01-23
; PRIOR APPLICATION NUMBER: JP P1998-346198
; PRIOR FILING DATE: 1998-12-04
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 9
; LENGTH: 3715
; TYPE: DNA
; ORGANISM: Rattus sp.
US-09-600-776-9


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QY 415 -----GluIleSerIleIleAsnIleLysGlyAsnMetSerGlyAsn 428
Db 1942 GAGCTGCCCGGGGACAGGTG-----GTAAAGGCCAAAT----- 1977
QY 429 ArgArgThrAlaAsnIleLysSerLeuGlyTyrSerAspLeuPheCysLeuSerLysGlu 448
Db 1978 -----GCCGAGTGAAGGGGTGACGTACTCGTCTCTGCAGTGTCTGCAGCTGGCT 2028
QY 449 AspLeuArgGluValLeuSerGluTyrProGlnAlaGlnThrIleMetGluGluLysGly 468
Db 2029 GGCCTGCACGACAGCGCTTGGCTGTACCGCGAGTTTGGCCCGCGCTTC---AGTCGTGGC 2085
QY 469 ArgGluIleLeuLeuLysMetAsnLysLeuAspValAsnAlaGluAlaGluIleAla 488
Db 2086 CTCGAGGGGAGCTCAGTCAAC---CTGGGTGTGGGGAGGCTCTGCAGAGTG--- 2139
QY 489 LeuGlnGluAlaThrGluSerArgLeuArgGlyLeuAspGlnGlnLeuAspLeuGln 508
Db 2140 -----GACACCAGCTCCCTGAGCGCGCAATACCCCTTATGTCCACGCTGGAG 2187
QY 509 ThrLys----- 510
Db 2188 GAGAAGGAGACAGATGGGAGCAGGGCCCCACGGTCTCCCCAGCCCCAGCTGATGAGGCC 2247
QY 511 -----PheAlaArgLeuLeuAla 516
Db 2248 TCCAGCCCCCTGCTGCCCTGGTGCACCTCCTCATCTCAGCTGCCAAGCTGCTATCC 2307
QY 517 GluLeuGluSerSer----- 521
Db 2308 CCACGTGGAACAGCACCCCGGCTCGTCTAGGTGCGAGGGAGGCCAGGCAGGGCAGGG 2367
QY 522 AlaLeuLysIle-----AlaTyrArgIleGluArgLeuGluTrp 534
Db 2368 GCTTTGAAGGCTGAGGCTGGCCCTCTGCTCCCCCAGCGGCCCTAGAGGGGCTACGGCTG 2427
QY 535 GlnThrArgGluTyrProMetProGluAspLeuAlaGluAlaAspAspGluGlyGluPro 554
Db 2428 CCCCCCATGCCATGGAATGTGCCCCAGATCTGAGCCCCCAGGGTAGTAGTGGC---ATT 2484
QY 555 GluGluGlyThrSerLysAspGlu-----GluGlyArgAlaSerGlnGluGlyPro 571
Db 2485 GAAGACGGCTGTGGCTCGACCAACCAAGTTCTCTTCCGGCTGGGCCAGTCTGGCCCG 2544
QY 572 -----ProGlyProGlu 575
Db 2545 GAATGTAGCAGCAGCCCCCTCCCTGGACCAGAG 2577
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Search completed: September 11, 2004, 01:52:35
Job time : 202 secs

Qy	1072	TGTTGGCGCACTTCCTGCTCTGGCGGTATNGGGTTCGCCACCATCATCGGTAGCATGAGCT	1131
Db	827	CCATGCTCAGCATGATCGTGGTGCCACCCTGCTACGCCATGTTTATTGGCCACGCCACTG	886
Qy	1132	CTGTCACTACAACATGAACACTGCAGATCGGCTTTTACACAGATCATGCACTGGTA	1191
Db	887	CCCTCATCCAGTCCTCGGATCTCTCCCGGCCAGTACAGGAAAGTACAACAGCGTGG	946
Qy	1192	AGAAGTACATGAAGCTCGACACGTCACACCGCAAGCTGGAGCGCGAGTTATTGACTGGT	1251
Db	947	AGCAGTACATGTCCTTTCAAGCTCCGCGCCGACACCCGCGCAGCGCATCCACGACTACT	1006
Qy	1252	ATCAGCACCTTCGAGATCAAACAAGAGATGACCAACAGGTAGCCATCTTACAGCACTTGC	1311
Db	1007	ACGAGCACCGCTA---CCAGGGCAAGATGTTCCAGCAGGAGAGCACCTCGGCGAGCTAA	1063
Qy	1312	CTGAGCGGCTGCGGGCAGAAGTGGCTGTGCTGTGCACCTGTCCACTCTGAGCGCGGTGC	1371
Db	1064	GCGAGCCCCTGCGGGAGGAGATCATCAACTTTAACTGTGCGAAGCTGGTGCCCTCCATGC	1123
Qy	1372	AGATCTTTCAAGACTGTGAGCGCCAGCCTGCTGAGGAGCTGTGTTCTGAAGCTTCGAGCCCC	1431
Db	1124	CAC TGTTTGCCAATTCGGGACCCCAACTTCGTGTGCTGATGCTGCTGACCAAGCTCGTTCG	1183
Qy	1432	AGACCTACTCACAGGTGAATATGTATGCCGCAAAAGGAGACATTGGCCCAAGATGTACA	1491
Db	1184	AGGTCTTCAGCCTGGGGACTACATCATCTCGGNAAGSCACCATTTGCCAAGAATGTACT	1243
Qy	1492	TCATCCGAGGGGTCAACTGGCGGTGGTGCAAGT	1527
Db	1244	TCATCCAGCATGGCGGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGT	1279

RESULT 2

US-08-997-685A-5
; Sequence 5, Application US/08997685A
; Patent No. 6551821
; GENERAL INFORMATION:
; APPLICANT: The Trustees of Columbia University
; APPLICANT: Kandel, Eric
; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof
; FILE REFERENCE: 0575/54806
; CURRENT APPLICATION NUMBER: US/08/997,685A
; CURRENT FILING DATE: 1997-12-12
; NUMBER OF SEQ ID NOS: 60
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 1507
; TYPE: DNA
; ORGANISM: mouse;
US-08-997-685A-5

Query Match	3.0%	Score 70.2;	DB 4;	Length 1507;
Best Local Similarity	46.1%;	Pred. No. 2.3e-09;		
Matches 351;	Conservative	0;	Mismatches 398;	
			Indels 12;	Gaps 3;

Qy	832	TTGCATGCGAAGCTGATGTTTACATTTTTGTCGTCATCCATTGGAACAGCTGCCTAT	891
Db	703	TACGCATCGTGAACCTCATTGGCATGATCTTCTGCTGTCTCACTGGGATGGCTGCCTGC	762
Qy	892	ACTTTGCCCTATCCCGGTACTCGTGGCTTGGGGGTGACGATGGGTGTACCCGGAGCCCG	951
Db	763	AGTTCCTAGTGCCCATGCTGCAGGACATTCGCCCATGACTCGTGGGTGTCCATCATGGCA	822
Qy	952	CGCAGCTTGGCTTTGAGCGCTCGGGCGCCAGTAGTACCTCTATAGCTTTTACTTCTCCAGC	1011
Db	823	TGTTGAATAACTCTCGGGGAAGCAGTATTCTCTACGCCCTCTTCAAGGCCCATGAGCCACA	882
Qy	1012	TGATCTACTTACAGTGGGCGATACACGGCCGCCAGCCAGGAGAGAGTACTCTTCA	1071
Db	883	TGCTGTGCATTTGGGTATGGACGGCAGGACCCCGTAGGCATGTCTGACGTCTGGCTCACCA	942
Qy	1072	TGTTGGGCGACTTCCTCTGTGCCCGCTCATGGGTTTTGGCCACCATCATGGGTAGCATGAGCT	1131

		943	TGCTCAGCATGATCGTGGGGGC---CACCTGTGCTATGCCATGTTTCATCGGCCACGCCCACTG	999
Db				
		1132	CTGTGTCATCTACAATGAACACTGCAGATGCGGCTTTTACCACAGATCATGCACACTGGTGA	1191
Qy				
		1000	CCCTCATCCAGTCGCTAGACTCTCCCGGGCCAGATTACAGGAGAAGTATAAACAGGTGG	1059
Db				
		11192	AGAAGTACATGAAGCTGCAGCAGCTCAACCGCAAGCTGGAGCGCGGAGTTATTGACTGGT	1251
Qy				
		1060	AGCAGTACATGTC TTTTCCAAAGCTCCGCGCTGACACCCGACAGCGCATCCATGACTACT	1119
Db				
		1252	ATCAGCACCTGCAGATCAACAAGAGAATGACCAACGAGGTAGCCATCTTACAGCACTTGC	1311
Qy				
		1120	ATGAACACCCGTTA---CCAAGGCAAGATGTTTGATGAGGAAGCATCCTGGGTGAGTTGA	1176
Db				
		1312	CTGAGCGCTCGCGGCAGAAAGTGGCTGTGCTGTGCACCTGTCCACTCTCTGAGCGGGTGC	1371
Qy				
		1177	GTGAGCCACTTCGAGAGGAGATCATCAACTTTTACTGCCGAAGCTGGTGGCATCATGC	1236
Db				
		1372	AGATCTTTCAAGAACTGTGAGGCCAGCGCTGCTGAGGAGTGTGTGCTGAAGCTCGACGCC	1431
Qy				
		1237	CACCTGTTTGC AACGCGAGATCCCAAACCTTTGTGACATCCATGCTGACCAAGTTGCGTTTCG	1296
Db				
		1432	AGACCTACTCACAGGTGATATGATGCGCAAGGAGAGACATGGCCAGAGATGTACA	1491
Qy				
		1297	AGGTCTTTCAGCTCGGGGATTTACATATCCGCGAAGGCCACCATCGGCAAGAATGTACT	1356
Db				
		1492	TCATCCGAGAGGGTCAACTGGCCGTTGGTCAGATGATGGTATCACACAGTAGTGTGTGC	1551
Qy				
		1357	TTATCCNAGACGGGTGGTCAGCGTCTACTAAGGG-----CAACAAAGACACCAAGC	1410
Db				
		1552	TCGGTCAGGGCTCTACTTTTGGGAGATCAGCATCATCAAC	1592
Qy				
		1411	TGGCTGATGCTCCTATTTTGGAGAGATCTGTTGCTGACC	1451
b				

RESULT 3

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US-08-997-685A-11
; Sequence 11, Application US/08997685A
; Patent No. 6551821
; GENERAL INFORMATION:
; APPLICANT: The Trustees of Columbia University
; APPLICANT: Kandel, Eric
; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof
; FILE REFERENCE: 0575/54806
; CURRENT APPLICATION NUMBER: US/08/997,685A
; CURRENT FILING DATE: 1997-12-12
; NUMBER OF SEQ ID NOS: 60
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 11
; LENGTH: 1790
; TYPE: DNA
; ORGANISM: human;
US-08-997-685A-11

```

Query Match	2.9%	Score 65.8;	DB 4;	Length 1790;
Best Local Similarity	45.4%	Pred. No. 5.1e-08;		
Matches 361;	Conservative	0;	Mismatches 422;	Indels 12;
				Gaps 3;

Qy	835	GCATTGCCAAGCTGATGCTTTTACATTTTTTTCGTCTATCCATTGGAAACAGCTGCTATACT	894
Db	660	GGATCTGCATCTCATCAGCATGATGCTGCTCTGCCACTGGGACGGCTGCTGCAGT	719
Qy	895	TTGCGCTATCCCGTACTCTGGGCTTCCGGCGTGAACGATGGGTGTATCCCGAACCCCGCGC	954
Db	720	TCCTGGTGCTATGCTCAGAGACTTCCCGCGCAACTGCTGGGTGTCATCAATGGCATGG	779
Qy	955	AGCTGCGCTTTGACGCGCTCGGGCGCGAGTACTCTATAGCTTTTATCTTCCACGCTGA	1014
Db	780	TGAACCACTCGTGAGTGAAC TG--TACTCCTTCGCACCTCTTCAAGGCCCATGAGCCACA	836
Qy	1015	TACTGACTACAGTGGGGCGATACACCGCGCGCAGCGGGAAGAAGATGACTCTTTCATGG	1074

837 TGCTGTGATCGGTGACGCGCGGAGCGCCGCGGAGGAGCATGACGGACATCTGGCTGACCA 896
1075 TGGCGACTTCTCTGCTGCGCGTGTATGGTTTTCGACACATCATGGGTAGATGAGCTGTG 1134
897 TGCTCAGCATGATGTGGGTGCCACTGCTACGCGATGTTTCATCGGCGACGCCACTGCC 956
1135 TCATCTCAACATGAACATGACATGCGGTCTTCTACCCAGATCATGCACTGCTGGAAGA 1194
957 TCATCCAGTCTGCTGATCTCTCGCGGCGCGAGTACGAGGAGATCAAGAGGTGGAGC 1016
1195 AGTACATGAAGCTGACGACGTCACCGCAAGCTGAGCGCGGAGTATTAAGCTGGTATC 1254
1017 AGTACATGCTCTTCCACAGCTGCCAGTCTGCTCCGCGAGAGATCCACGACTACTATG 1076
1255 AGCACTTGCAGATCAACAGAGATGACCAAGAGGTAGCATCTTACAGCACTTGGCTG 1314
1077 AACACCGTTA---CCAGGGCAAGATGTTTACGAGGACAGCATCTCGGCGAGCTCAACG 1133
1315 AGCGGCTGCGGGCAGAGTGGCTGTCTGTGACCTGTCTGACCTCTGAGCGGGTGCAGA 1374
1134 GGCCCTTGGGGAGAGATGCTCAACTTCACTGCGGAGCTGGTGGCTTCCATGGCG 1193
1375 TCTTTCAGAACTGTAGGCCAGCTGCTGGAGGAGCTGGTGTGAAGCTGCAGCCCGAGA 1434
1194 TGTTGGCCAGCGCGACCCCAACTTCTGTACGGCCATGCTGACCAAGCTCAAGTTTCGAGG 1253
1435 CCTACTCACCAGTGAATATGTATCCCGCAAGAGAGACATTTGGCCAGAGATGTACATCA 1494
1254 TCTTTCAGCGGGTGTACTATCATCTCCGCGAAGCACCATTGGGAAGAGATGTACTTCA 1313
1495 TCCGAGAGGGTCAACTGCGCGTGTGGCAGATGATGTATCACACATGATGCTGTGCTCG 1554
1314 TCCAGCAGCGGTGTGAGCTGCTCACTAAGG-----CAACAAGAGATGAGTGT 1367
1555 GTGCGAGGCTTACTTTGGGAGATCAGCATCATCAACATCAAGGAGAAACATGTCTGGGA 1614
1368 CCGATGCTCTTACTTCCGGGAGATCTGCCTGTCTCACCGGGGCGCGCGACGCGAGCT 1427
1615 ACCGCCGACAGCCA 1629
1428 GCGGGCTGACACCTA 1442

RESULT 4
US-09-226-012-1
; Sequence 1, Application US/09226012
; Patent No. 6207383
; GENERAL INFORMATION:
; APPLICANT: Keating, Mark T.
; APPLICANT: Splawski, Igor
; TITLE OF INVENTION: MUTATIONS IN AND GENOMIC STRUCTURE OF HERG - A LONG QT
; FILE REFERENCE: 2323-136
; CURRENT APPLICATION NUMBER: US/09/226,012
; CURRENT FILING DATE: 1999-01-06
; EARLIER APPLICATION NUMBER: 09/122,847
; EARLIER FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 3480
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(3477)
US-09-226-012-1
Query Match 2.6%; Score 59.8; DB 3; Length 3480;
Best Local Similarity 45.9%; Pred. No. 3e-06;
Matches 205; Conservative 0; Mismatches 242; Indels 0; Gaps 0;
QY 1058 AGAGTACTCTTATGTTGGGCGACTTCTCTGCTGCGCGTCAATGGTTTCGCCACCATCAT 1117

1908 AGAAGATCTTCTCCATCTGGCTCATCTCTATTTGGCTCCCTCATGTATGTTAGCACTT 1967
1118 GGTAGCATGAGCTCTCTCATCTCAACATGAACATGACAGATGCGGCTTTCTTACCCAGA 1177
1968 CGGCAAGCTGTGGCCCATCATCCAGCGGCTGTACTCGGGGACAGCCCGCTACCAACACA 2027
1178 TCATGCACTGGTGAAGATGACATGAAGCTGACAGCATCAACCGCAAGCTGGAGCGCG 1237
2028 GATGCTCGGGTGGGAGTTCATCCGCTTCCACCATCCCCAATCCCCCTGGCCAGCG 2087
1238 AGTTATTGACTGGTATCAGCACTTCCAGATCAACAAGAAGATGACCAACAGGTAGCCAT 1297
2088 CTTGAGGAGTACTTCCAGACGCGCTGCTCTACACCAAGCATGACATGAACGCGGT 2147
1298 CTTACAGCATTTGCTGAGCGGTGCGGGCAGAGTGGCTGTGTGTGACCTGTGCAC 1357
2148 GCTGAAGGGCTTCCCTGAGTGCCTGCAAGGCTGACATCTGCTGCACTGAACCGCTCACT 2207
1358 TCTGAGCGGGTGCAGATCTTTCAGAACTGTAGGCGCAGCTGCTGAGGAGCTGTGCT 1417
2208 GCTGAGCATCTGCAACCCCTTCCGAGGGGCGACCAAGGGCTGCTTCGGGCGCTTGGCCAT 2267
1418 GAAGCTGCAGCGCCAGACCTACTTACCAGGTGAATATGTATGCCGCAAGAGAGACATTTG 1477
2268 GAAGTTCAAGACACACATGACACCGCCAGGGGACACACTGGTGCATGCTGGGACCTGCT 2327
1478 CCAAGAGATGTACATTCGAGAGG 1504
2328 CACCGCCTGTACTTCTATCTCCCGGG 2354

RESULT 5
US-09-226-012-3
; Sequence 3, Application US/09226012
; Patent No. 6207383
; GENERAL INFORMATION:
; APPLICANT: Keating, Mark T.
; APPLICANT: Splawski, Igor
; TITLE OF INVENTION: MUTATIONS IN AND GENOMIC STRUCTURE OF HERG - A LONG QT
; FILE REFERENCE: 2323-136
; CURRENT APPLICATION NUMBER: US/09/226,012
; CURRENT FILING DATE: 1999-01-06
; EARLIER APPLICATION NUMBER: 09/122,847
; EARLIER FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 3950
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (67)..(3543)
US-09-226-012-3
Query Match 2.6%; Score 59.8; DB 3; Length 3950;
Best Local Similarity 45.9%; Pred. No. 3.2e-06;
Matches 205; Conservative 0; Mismatches 242; Indels 0; Gaps 0;
QY 1058 AGAGTACTCTTATGTTGGGCGACTTCTCTGCTGCGCGTCAATGGTTTCGCCACCATCAT 1117
1974 AGAAGATCTTCTCCATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2033
1118 GGTAGCATGAGCTCTGCTCATCTCAACATGAACATGACAGATGCGGCTTCTTACCCAGA 1177
2034 CGGCAAGCTGTGGCCATCTTCCAGCGGCTGTACTCGGGCAGACGCCCGCTTACCAACACA 2093
1178 TCATGCACTGGTGAAGAGATGACATGAAGCTGACAGCATCAACCGCAAGCTGGAGCGCG 1237
2094 GATGCTCGGGTGGGAGTTCATCCGCTTCCACCATCCCCAATCCCCCTGGCCAGCG 2153

QY 1238 AGTTATTGACTGGTATCAGACCTCGAGATCAACAAGAGATGACCAACGAGGTAGCCAT 1297
Db 2154 CTTGAGAGGATCTTCCAGCAGCGCTGTCTTACCAACGCGATCGACATGAACCGCGT 2213
QY 1298 CTTACAGCATTGCTGAGCGGCTCGGGCGAGAGTGGCTGTGTCTGTGCACTCTGCCAC 1357
Db 2214 GCTGAAGGGCTTCCCTGAGTGGCTGCGAGCTGACATCTGCTGCACTGAACCGCTACT 2273
QY 1358 TCTGAGCGGGTGCAGATCTTTAGAACTGTGAGGCGAGCTGTGTGAGGAGCTGGTGTCT 1417
Db 2274 GCTGAGCAGCTGCAAAACCTTCCGAGGGGCCACCAAGGGCTGCCCTTCGGGGCTTGCCAT 2333
QY 1418 GAAGCTGAGCGCCAGACCTTCTACACAGGTGAATATGATATGCCGCAAGAGGACATTGG 1477
Db 2334 GAAGTTCAAGACCACACATGACACCGCCAGGGGACACATGTTGTCATGCTGGGGACCTGCT 2393
QY 1478 CCAAGAGATGTACATCATCCGAGAGGG 1504
Db 2394 CACCGCCTGTACTTCTCATCTCCGGGG 2420

RESULT 6

US-08-997-685A-3
; Sequence 3, Application US/08997685A
; Patent No. 6551821

GENERAL INFORMATION:

; APPLICANT: The Trustees of Columbia University

; APPLICANT: Kandel, Eric

; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof

; FILE REFERENCE: 0575/54806

; CURRENT APPLICATION NUMBER: US/08/997,685A

; PRIOR FILING DATE: 1997-12-12

; NUMBER OF SEQ ID NOS: 60

; SOFTWARE: Patent in version 3.1

; SEQ ID NO 3

; LENGTH: 1584

; TYPE: DNA

; ORGANISM: mouse;

US-08-997-685A-3

Query Match 2.4%; Score 56; DB 4; Length 1584;

Best Local Similarity 44.5%; Pred. No. 2.3e-05;

Matches 310; Conservative 0; Mismatches 380; Indels 6; Gaps 2;

QY 832 TTCCATGTCACAGCTGATGCTTTACATTTTGTCTCATCTATGGAACAGCTGCCTAT 891
Db 566 TGCATCTGTAACTGATCATGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 625
QY 892 ACTTTGCCCTATCCCGTACCTGGGCTTCGGGGCTGAGCATGGGTGTACCGGACCCCG 951
Db 626 AGTTCTGGTCCCATGCTGCAAGACTTCCCAGGACTGTGGGTGCTCATCAACACA 685
QY 952 CGAGCTGGCTTTGAGCGCTCGGGCCAGTACCTCTATAGCTTTTACTTTTCTCCAGC 1011
Db 686 TGGTGAACCACTCGTGAGC---GAGCTCTACTGTTGCGCTCTTCAAGCCATGAGCC 742
QY 1012 TGATCTGACTACAGTGGCGATACACGCGCCAGCAGGAGAGAGTACCTCTCA 1071
Db 743 ACATGCTGTGATCGGCTACGGGCGGAGGCGCGAGAGATGACAGATCTTGGCTGA 802
QY 1072 TGGTGGGCGACTTCTGTGCGCGCTCATGGGTTTTCGCCACCATATGGGTAGCATGACT 1131
Db 803 CCATGCTCAGCATGATCGTAGCGGCCACTCTATGCTATGCTTCTATGGCAGCCACTG 862
QY 1132 CTGTCACTCAACATGAACACTGAGATGGGCTTTTACCGAGATCATGCACTGGTGA 1191
Db 863 CGCTCATCGCTCCCTGATTCGTACCGCGCCCAATACAGGAGAGTACAAGCAAGTAG 922
QY 1192 AGAAGTATCAAGCTGACGACAGCTCAACCAAGCTGAGCGGCGAGTATTGACTGGT 1251
Db 923 AGCAATACATGCTCTTCAAACTGCGCGCTGACTTCCGCGAGAGATCCAGATTACT 982
QY 1252 ATCAGCAGCTGCAGATCAACAAGAGATGACCAACGAGGTAGCCATCTTACAGCACTTC 1311

Db 983 ATGACACCGGTA---CCAGGGAGAGATGCTGTATGAGGACAGCATCTTGGGGAACCTCA 1039
QY 1312 CTGAGCGGCTCGGGCGAGAGTGGCTGTGTCTGTGCACTGTGCCACTCTGAGCCGGGTGC 1371
Db 1040 ACGGGCCACTCGGTGAGGAGATTGTGAATTTCAACTGCCGGAAGCTGGTGGCTTCCATGC 1099
QY 1372 AGATCTTTTCAAACTGTGAGGCGAGCCTGTCTGAGGAGCTGGTGTGAGCTGAGCCGCC 1431
Db 1100 CGCTGTTTGGCAATGACAGACCCCAATTTTCGTACAGCCCATGTCACAAAGCTCAAAATTG 1159
QY 1432 AGACTCTACTCACCAGGTGAATATGATGCCCAAGGAGACATTTGCCCAAGAGATGTACA 1491
Db 1160 AGGTCTTCCAGCTGGAGATTACATCATCCAGAGGGAGACCATCGGAGAGAGATGTACT 1219
QY 1492 TCATCCGAGAGGGTCAACTGGCGCTGTGGCAGATG 1527
Db 1220 TCATCCAGCATGGGTGGTGGAGCTGTCTCACCAAGG 1255

RESULT 7

US-09-358-383C-3

; Sequence 3, Application US/09358383C

; Patent No. 6518398

; GENERAL INFORMATION:

; APPLICANT: Curtis, Roy A. J.

; TITLE OF INVENTION: NOVEL POTASSIUM CHANNEL MOLECULES AND USES THEREFOR

; FILE REFERENCE: MNI-055CP

; CURRENT APPLICATION NUMBER: US/09/358,383C

; PRIOR FILING DATE: 1999-07-21

; PRIOR APPLICATION NUMBER: USN 09/119,855

; PRIOR FILING DATE: 1998-07-21

; NUMBER OF SEQ ID NOS: 36

; SOFTWARE: Patent in Ver. 2.0

; SEQ ID NO 3

; LENGTH: 3249

; TYPE: DNA

; ORGANISM: Macaca sp.

; FEATURE:

; NAME/KEY: CDS

; LOCATION: (1)..(3249)

US-09-358-383C-3

Query Match 2.3%; Score 53.6; DB 4; Length 3249;

Best Local Similarity 45.6%; Pred. No. 0.00015;

Matches 268; Conservative 0; Mismatches 314; Indels 6; Gaps 2;

QY 943 CGGACCCCGCGCAGCTGGCTTTGAGCGCCTTCGGCGCCAGTACCTCTATAGCTTTTACT 1002
Db 1313 CGGGGCTGGAGCTGTAGGCGGCCCTCGCTGCGCAGCGCTACATCACTCCCTCTACT 1372
QY 1003 TCTCAGCTGATCTGACTACAGTGG---CGATACACCCCGCCAGCCAGGGAAG 1059
Db 1373 TCGCACTCAGCAGCCTCACCAGCGTGGGCTTCGGCAAGCTGCGCCCAACACGCACTG 1432
QY 1060 AGTACCTCTTCACTGGTGGCGACTTCTGTGCGCGCTCATGGTTTTCGCCACCATCAGG 1119
Db 1433 AGAAGATCTTCTCCATCTGCACCATGCTCATCGCGGCCCTGATGCACGCGGTGTTTCG 1492
QY 1120 GTAGCATGAGCTGTGTCTATCTACACATGAACACTGACAGATGCGGCTTCTTACCAGATC 1179
Db 1493 GGAAGCTGACGGCCATCATCAGCGCATGTACGCCCGCGCTTCTGTACACAGCCGA 1552
QY 1180 ATGCACCTGGTGAAGAGTACATGAAGCTGACGACGTCAACCGAAGCTGAGCGGCGAG 1239
Db 1553 CGCGCAGCTGCGGAGCTACATCCGCATCCACCGTATCCCAAGCCCTCAAGCAGCGCA 1612
QY 1240 TTATTGACTGTATCAGCACCTGCAGATCAACAGAGATCAACCAAGAGTACCAAGCTAGCTCT 1299
Db 1613 TGCTGGAGTACTTCCAGGCCACTGGGCGGTGAACATGGCATGCACACCAAGCTGCT 1672
QY 1300 TACAGCATTTGCTGAGCGCTGCGGCGAGAGTGGCTGTGTCTGTGACCTGTCCACTC 1359

Db 1673 TGCAGAGCTCCCTGACGAGCTGCGCGAGACATCGCCATCTGCACAGGAGGTCC 1732
Qy 1360 TGACCCGGGTGACAGATCTTTTCAGAACTGTGAGGCCAGCCTGCTGAGAGAGCTGTGTCTGA 1419
Db 1733 TG---CAGCTGCCGCTGTTTTCAGGAGCAGCAGCCGCGGTGCTCGGGGCACTGTCTCTGG 1789
Qy 1420 AGCTGACAGCCCGACAGCCTACTCACCAGTGAATATGATGCGCAAAAGGAGACATTGGCC 1479
Db 1790 CCTGCGCGCGCTCTCTGACGCGCGGAGTACCTATCCACAGGCGATGCCCTGCG 1849
Qy 1480 AAGAGATGTATCATCCGAGAGGGTCAACTGGCGGTGGTGGCAGATG 1527
Db 1850 AGGCCCTCTACTTGTCTGCTCTGCTCCATGGAGGTGCTCAAGGGTG 1897

RESULT 8

US-09-358-383C-1
; Sequence 1, Application US/09358383C
; Patent No. 6518398
; GENERAL INFORMATION:
; APPLICANT: CURTIS, RORY A. J.
; TITLE OF INVENTION: NOVEL POTASSIUM CHANNEL MOLECULES AND USES THEREFOR
; FILE REFERENCE: MNI-055CP
; CURRENT APPLICATION NUMBER: US/09/358,383C
; CURRENT FILING DATE: 1999-07-21
; PRIOR APPLICATION NUMBER: USSN 09/119,855
; PRIOR FILING DATE: 1998-07-21
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 3355
; TYPE: DNA
; ORGANISM: Macaca sp.
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (104)..(3352)
US-09-358-383C-1

Query Match 2.3%; Score 53.6; DB 4; Length 3355;

Best Local Similarity 45.6%; Pred. No. 0.00015;

Matches 268; Conservative 0; Mismatches 314; Indels 6; Gaps 2;

Qy 943 CGGACCCCGCGCAGCTGCTTTTCAGCGCCTGCGGCGCAGTACTCTATAGCTTTTACT 1002
Db 1416 CGGGCTGAGCTGCTAGGCGGCGCTGCTGCGAGCGCTATACCTCCCTCTACT 1475
Qy 1003 TCTCCACGCTGATCTACTACACTGGG---CGATACACCCCGCCAGCCAGGGAAG 1059
Db 1476 TCGCACTCAGAGCCTCACCAGCGTGGGCTTTCGCAACGCTGTCGCAACGAGACTG 1535
Qy 1060 AGTACCTTTCATGTTGGGCACTTCTGCTGGCGGTGATGGTTTGGCCACCATCTGG 1119
Db 1536 AGAAGATCTTCTCCATCTGCACTGCTCATCGCGCGCTGATGCAAGCGGTGTTGTCG 1595
Qy 1120 GTAGCATGAGCTCTGTCTATCTACAACTGAACACTGCGAGTGGCGCTTCTACCCAGATC 1179
Db 1596 GGAAGTGAAGGCACTATCAGGCGATGACGCGCGCTTCTGTACACAGAGCGCA 1655
Qy 1180 ATGCACTGGTGAAGAAGTACATGAAGCTGACAGCAGTCAACCGCAAGCTGAGCGGCGAG 1239
Db 1656 CGCGGACCTGCGGCACTATATCCGATCCACCGTATCCCAAGCCCTCAAGCAGCGCA 1715
Qy 1240 TTATGATGATATCAGACCTGATGATCAACAGAGATGACCAACGAGGTAGCATCT 1299
Db 1716 TGCTGGAGTACTTCAGGCGCACTTGGGCGGTGAACAATGGATGGATGACACCCAGCTGC 1775
Qy 1300 TACAGCACTTCCTGAGCGGTGCGGCGAGAGTGGCTGTCTGTGCACTGTCCATCTC 1359
Db 1776 TGCAGAGCTCCCTGACAGAGTGGCGGAGATGCGCATGCACTGACCAAGGAGGTCC 1835
Qy 1360 TGAGCCGGGTGAGATCTTTTCAGAACTGTGAGGGCCAGCCTGCTGAGAGAGCTGTGTCTGA 1419
Db 1836 TG---CAGCTGCCGCTGTTTCAGGAGCAGCAGCGCGGTGCTTGGGCACTGTCTCTGG 1892

Qy 1420 AGCTGACGCCCCAGACCTACTCACCAGTGAATATGATGCGCAAAAGGAGACATTGGCC 1479
Db 1893 CCTGCGCGCGCTGCTTTCAGCGCGCGGAGTACCTCATCCCAAGGCGATGCCCTGCG 1952
Qy 1480 AAGAGATGTATCATCCGAGAGGGTCAACTGGCGGTGGTGGCAGATG 1527
Db 1953 AGGCCCTCTACTTGTCTGCTCTGCTCCATGGAGGTGCTCAAGGGTG 2000

RESULT 9

US-08-232-463-14/C
; Sequence 14, Application US/08232463
; Patent No. 5670367
; GENERAL INFORMATION:
; APPLICANT: DORNER, F.
; APPLICANT: SCHEIFLINGER, F.
; APPLICANT: FALKNER, F. G.
; TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
; NUMBER OF SEQUENCES: 52
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY & LARDNER
; STREET: 1800 DIAGONAL ROAD, SUITE 500
; CITY: ALEXANDRIA
; STATE: VA
; COUNTRY: USA
; ZIP: 22313-0299
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY DISK
; COMPUTER: IBM PC COMPATIBLE
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA: US/08/232,463
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/07/935,313
; FILING DATE:
; APPLICATION NUMBER: EP 91 114 300.6
; FILING DATE: 26-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: BENT, STEPHEN A.
; REGISTRATION NUMBER: 29,768
; REFERENCE/DOCKET NUMBER: 30472/114 IMMU
; TELEPHONE: (703)836-9300
; TELEFAX: (703)683-4109
; TELEX: 899149
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 7218 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; CLONE: pTZ9pt-Fls
US-08-232-463-14

Query Match

Best Local Similarity 2.4%; Pred. No. 0.00035;

Matches 9; Conservative 223; Mismatches 150; Indels 0; Gaps 0;

Qy 1672 AGGAGACCTGCGGAGGTGCTGAGCGGATATCCCAAGCACACCATCATGTGAGGAGA 1731
Db 1436 ACRRR 1377
Qy 1732 AAGACCTGAGATCCTCTGCTGAAATGACAGTTGGACGTGAATGCTGAGCAGCTGAGA 1791
Db 1376 RRR 1317
Qy 1792 TCGCCCTGAGGAGGCCACAGAGTCCCGGCTACAGGCGCTAGACGAGCTGAGTATC 1851

Db 1493 GGAACGTGAAGGCGCATCATCCAGCGCATGTAGCCCGCGCTTCTGTACACAGCCGCA 1552
Qy 1180 ATGCACCTGGTGAAGAAGTACATGAGCTGAGCGAGTCAACCGCAAGTGTGAGCGGCGAG 1239
Db 1553 CGCGGACCTCGGCGACTACATCGCATCCACCGTATCCCAAGCCCTCAAGCAGCGCA 1612
Qy 1240 TTATTGACTGTATCAGCACCTGCAGATCAACAAGAGATGACCAAGAGGTAGCCATCT 1299
Db 1613 TGCTGGAGTACTTCAGGCCACCTGGGGGGTGAACAATGGGATCGACACCGAGCTGC 1672
Qy 1300 TACAGCACTTGCCTGAGCGGCTGGGGGAGAGTGGCTGTCTGTGCACCTGTCCACTC 1359
Db 1673 TGCAGAGCCTCCCTGACGAGCTGGCGCAGACATCGCCATGCACCTGCACAAGGAGTCC 1732
Qy 1360 TGACCCGGGTGCAGATCTTTCAGAACTGTGAGGCGAGCCTCTGGAGAGCTGTGTCTGA 1419
Db 1733 TG---CAGCTGCOACTGTTTGAAGCGGCCAGCCGGCTGCTGGGCACTGTCTCTGG 1789
Qy 1420 AGCTGCAGCCCCAGACCTACTCACCAGGTGAATATGTATGTCGCGCAAGGAGACATTTGCC 1479
Db 1790 CCCTGGCGCGCCCTTCTGCAGCGCGGCGAGTACCTCATCCACAAGCGCATGCCCTGC 1849
Qy 1480 AAGAGATGTACATCATCCGAGAGGTCACACTGGCCGTGGTGGCAGATG 1527
Db 1850 AGGCCCTCTACTTTGTCTGCTCTGCTCCATGGAGGTGCTCAAGGGTG 1897

RESULT 12

US-09-600-776-1
; Sequence 1, Application US/09600776
; Patent No. 6326168
; GENERAL INFORMATION:
; APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.
; TITLE OF INVENTION: A novel potassium channel protein
; FILE REFERENCE: Y9903-PCT
; CURRENT APPLICATION NUMBER: US/09/600,776
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: JP P1998-011434
; PRIOR FILING DATE: 1998-01-23
; PRIOR APPLICATION NUMBER: JP P1998-346198
; PRIOR FILING DATE: 1998-12-04
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 3323
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (6)...(3257)
US-09-600-776-1

Query Match 2.3%; Score 52; DB 4; Length 3323;
Best Local Similarity 45.4%; Pred. No. 0.00041;
Matches 267; Conservative 0; Mismatches 315; Indels 6; Gaps 2;

Qy 943 CGGACCCGCGCAGCCTGGCTTTGAGCGCTGGCGCGCAGTACTCTATAGCTTTTACT 1002
Db 1318 CGGGCTGGAGCTGCTGGCGGCGCGCTGCTGTCGCGCGCTACATCACCTCCCTCTACT 1377
Qy 1003 TCTCCACGCTGATCTACTACAGTGGG---CGATACACCGCGCGCAGCGGGAAGAG 1059
Db 1378 TCGCACTCAGCAGCCTCACCAGCGTGGCTTCGGCAACGCTGTCGCGCAACACGACACCG 1437
Qy 1060 AGTACCTTTTCATGGTGGCGGCTTCTGTGGCGGCTCATGGGTTTGGCCACCATCATGG 1119
Db 1438 AGAAGATCTTCTCCATCTGCACCATGTCTATCGCGGCGCTGATCGACGCGGTGTGTG 1497
Qy 1120 GTAGCATGAGCTCTGTCTATCTACAACTGAACACTGACAGATGCGGCTTTCTACCCAGATC 1179
Db 1498 GGAACGTGACGCCATCATCCGCGCATGTACGCGCGCGCTTCTGTGTACACAGCGCGCA 1557

Qy 1180 ATGCACCTGGTGAAGAAGTACATGAGCTGAGCGAGTCAACCGCAAGCTGTGAGCGGCGAG 1239
Db 1558 CGCGGACCTCGGCGACTACATCGCATCCACCGTATCCCAAGCCCTCAAGCAGCGCA 1617
Qy 1240 TTATTGACTGTATCAGCACCTGCAGATCAACAAGAGATGACCAAGAGGTAGCCATCT 1299
Db 1618 TGCTGGAGTACTTCAGGCCACCTGGGGGGTGAACAATGGGATCGACACCGAGCTGC 1677
Qy 1300 TACAGCACTTGCCTGAGCGGCTGGGGGAGAGTGGCTGTCTGTGCACCTGTCCACTC 1359
Db 1678 TGCAGAGCCTCCCTGACGAGCTGGCGCAGACATCGCCATGCACCTGCACAAGGAGTCC 1737
Qy 1360 TGACCCGGGTGCAGATCTTTCAGAACTGTGAGGCGAGCCTCTGGAGAGCTGTGTCTGA 1419
Db 1738 TG---CAGCTGCCACTGTTTGAAGCGGCCAGCCGGCTGCTGGGCACTGTCTCTGG 1794
Qy 1420 AGCTGCAGCCCCAGACCTACTCACCAGGTGAATATGTATGTCGCGCAAGGAGACATTTGCC 1479
Db 1795 CCCTGGCGCGCCCTTCTGCAGCGCGGCGAGTACCTCATCCACAAGCGCATGCCCTGC 1854
Qy 1480 AAGAGATGTACATCATCCGAGAGGTCACACTGGCCGTGGTGGCAGATG 1527
Db 1855 AGGCCCTCTACTTTGTCTGCTCTGCTCCATGGAGGTGCTCAAGGGTG 1902

RESULT 13

US-09-694-777A-19
; Sequence 19, Application US/09694777A
; Patent No. 6638736
; GENERAL INFORMATION:
; APPLICANT: PARDO-FERNANDEZ, LUIS ANGEL
; APPLICANT: STUHRER, WALTER
; APPLICANT: BECKH, SYNNOVE
; APPLICANT: BRUGGEMANN, ANDREA
; APPLICANT: FERNANDEZ-MIRANDA, DONATO DEL CAMINO
; APPLICANT: PEREZ, ARACELI SANCHEZ
; APPLICANT: WESELOH, RUDIGER
; TITLE OF INVENTION: NOVEL HUMAN K+ ION CHANNEL AND THERAPEUTIC APPLICATIONS
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: MFG-8
; CURRENT APPLICATION NUMBER: US/09/694,777A
; CURRENT FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: PCT/EP99/02695
; PRIOR FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: EP 98 10 7268.9
; PRIOR FILING DATE: 1998-04-21
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 19
; LENGTH: 3041
; TYPE: DNA
; ORGANISM: Bovine sp.
US-09-694-777A-19

Query Match 2.2%; Score 50.8; DB 4; Length 3041;
Best Local Similarity 44.5%; Pred. No. 0.00083;
Matches 245; Conservative 0; Mismatches 302; Indels 3; Gaps 1;

Qy 984 TACCTCTATAGCTTTTACTTCTCCACGCTGATCTACTACTACAGTGGG---GATACACCG 1040
Db 1305 TACATCTCCTCGTTGTATTTTCCATGACCCAGCCTCACCAGCGTGGGCTTTGGGAACATC 1364
Qy 1041 CGCGCAGCAGGGAAGAGATGCTCTTTCATGGTGGCGACTTCTCTGTGGCGGTGATG 1100
Db 1365 GCCTCGTCCACAGACATTTGAGAAGATCTTTGGCGTGGCCATCATGATGTTGGCTCCCTC 1424
Qy 1101 GGTTCGCAACCATCATGGGTAGCATGAGCTCTGTCTATCTTACACATGACACTGAGAT 1160
Db 1425 CTCTATGCCACCATCTTTGGGAATGTGACCATTTTCCACAGATGTACGCCAACACC 1484
Qy 1161 GCGGCTTTTACCCAGATCATGCACTGGTGAAGAAGTACATGAAGCTGACGAGCTCAAC 1220
Db 1485 AACAGGTACCATGAGATGCTCAACAGTGTCCGGGACTTCTTGAAGCTCTACAGGTGCC 1544

QY 1221 CGCAAGCTGGAGCGCGAGTTATTGACTGGTATCAGACCTGCAGATCAACAGAGATG 1280
Db 1545 AAGCGGTGTAGCGGCGAGTATGATGATACATCGTGTCCATGTCCAGAGGC 1604
QY 1281 ACCAAGAGGTAGCCATCTTACAGACCTTGTCTGAGCGGCTGCGGCGAGAGTGGCTGTG 1340
Db 1605 ATTGACACAGAGAGGTCTCTGAGATCTGCCCAAGGACATGAGAGCGGACATCTGCGTG 1664
QY 1341 TCTGTGCACTGTGCACTCTGAGCGGCTGAGATCTTTTCAAGAACTGTGAGGCCAGCCTG 1400
Db 1665 CACCTAAACCGCAAGGTCTTCAAGAGGACACCGAGCCTTTCCGCTGGCCAGGCGGCTGC 1724
QY 1401 CTGAGGAGCTGTGCTGAGCTGAGCGCCAGACCTACTCACCAGGTGAATATGTATGC 1460
Db 1725 CTGCGGCGACTGGCCATGAGTTCAGACGGTGCACTCGGCCCTGGGGACCTCATCTAC 1784
QY 1461 CGCAAGAGAGACATTGGCCAAAGAGATGTACATCATCCGAGAGGGTCAACTGGCCGTGTG 1520
Db 1785 CACGAGGGGAGAGCGTGCAGACGCTGTGCTTCGTGGTCTCGGCTCCCTGGAGTGATC 1844
QY 1521 GCAGATGATG 1530
Db 1845 CAGGATGACG 1854

RESULT 14

US-09-336-643A-19
; Sequence 19, Application US/09336643A
; Patent No. 6399761

GENERAL INFORMATION:

; APPLICANT: Miller, Andrew P.
; APPLICANT: Curran, Mark Edward
; APPLICANT: Hu, Ping
; APPLICANT: Rutter, Marc
; APPLICANT: Wang, Jian-Wang
; TITLE OF INVENTION: No. 6399761el Human Potassium Channels
; FILE REFERENCE: SEQ-15P
; CURRENT APPLICATION NUMBER: US/09/336,643A
; CURRENT FILING DATE: 1999-06-18
; PRIOR APPLICATION NUMBER: 60/076,687
; PRIOR FILING DATE: 1998-08-07
; PRIOR APPLICATION NUMBER: 60/116,448
; PRIOR FILING DATE: 1999-01-19
; PRIOR APPLICATION NUMBER: PCT/US99/03826
; PRIOR FILING DATE: 1999-02-22
; NUMBER OF SEQ ID NOS: 87
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19

LENGTH: 3857

TYPE: DNA

ORGANISM: H. sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (249)...(3495)

OTHER INFORMATION: K+Hnov14

US-09-336-643A-19

Query Match 2.2%; Score 50.4; DB 4; Length 3857;

Best Local Similarity 45.2%; Pred. No. 0.0012;

Matches 266; Conservative 0; Mismatches 316; Indels 6; Gaps 2;

QY 943 CGGACCCCGCGAGCTCGCTTTGAGCGCTTGGCGCGCAGTACCTCTATAGCTTTTACT 1002
Db 1558 CGGGCTGAGCTGTGGCGGCCGCTGCTGCGAGCGCTTACATACCTCCCTCTACT 1617
QY 1003 TCTCACGCTGATCTAGTACAGTGGG---CGATACCGCGCCGCGCAGGCGGAGAG 1059
Db 1618 TCGACTCAGCAGCTCACCAGGTGGGCTTCGGCAACGCTGCCCAACACGGACACCG 1677
QY 1060 AGTACCTCTTATGTTGGCGGACTTCTGCTGCGCGCTCATGGTTTGGCACCATCATGG 1119
Db 1678 AGAAGATCTTCTCCATCTGSCACCATGCTCATCGGCGCCCTGATGACGCGGTGGTGTG 1737

QY 1120 GTAGCATGAGCTGTGTCTATCTACACATGACATCTGCAGATCGCGCTTTCTACCCAGATC 1179
Db 1738 GGAACGTGACCGGCATCATCCAGCGCATGTACGCCCGCTTTCTGTACACAGCCGCA 1797
QY 1180 ATGCACTGGTGAAGAAGTACATGAAGCTGCAGCAGCTCAACCCGCAAGCTGGAGCGCGAG 1239
Db 1798 CGCGGACCGCGGCGACTACATCCGATCCACCGTATCCCCAAGCCCTCAAGCAGCGCA 1857
QY 1240 TTATTGACTGTATCAGCACTCTGCAGATCAACAGAGATCAACCAAGAGTAGCATCT 1299
Db 1858 TGCTGGAGTACTTCCAGGCCACCTGGCGGTGGAACAATGGCATCGACACACCAGAGCTGC 1917
QY 1300 TACAGCACTTCTGAGCGGCTGCGGCGAGAGTGGTGTCTGTGCACCTGTCTCACTC 1359
Db 1918 TGCAGAGCTCCCTGACGAGCTGCGCGAGACATGCCATGACCTGCACAGAGAGTCC 1977
QY 1360 TGAGCCGGGTGCAGATCTTTTCAAGAACTGTAGGCCAGCCTGTGGAGAGCTGTGTCTGA 1419
Db 1978 TG---CAGCTGCCACTGTTTCAGGCGGCCAGCCGCGCTGCTGCGGCACTGTCTCTGG 2034
QY 1420 AGCTGACGCCCGAGACCTACTCACCAGTGAATATGTATGCGGCAAGAGACATGGCC 1479
Db 2035 CCCTGGCGCGCCCTTCTGCACGCGCGGCGAGTACCTCATCCACCAAGCGCATGCCCTGC 2094
QY 1480 AAGAGATGTACATCATCCGAGAGGTCAACTGGCCGTGTTGGCAGATG 1527
Db 2095 AGGCCCTTACTTTTGTCTGTCTGCTCCATGGAGGTGCTCAAGGGTG 2142

RESULT 15

US-09-600-776-5
; Sequence 5, Application US/09600776
; Patent No. 6326168

GENERAL INFORMATION:

; APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.
; TITLE OF INVENTION: A novel potassium channel protein
; FILE REFERENCE: Y9903-PCT
; CURRENT APPLICATION NUMBER: US/09/600,776
; CURRENT FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: JP P1998-011434
; PRIOR FILING DATE: 1998-01-23
; PRIOR APPLICATION NUMBER: JP P1998-346198
; PRIOR FILING DATE: 1998-12-04
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 5

LENGTH: 3064

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (4)..(3057)

US-09-600-776-5

Query Match 2.2%; Score 49.8; DB 4; Length 3064;

Best Local Similarity 45.5%; Pred. No. 0.0016;

Matches 217; Conservative 0; Mismatches 257; Indels 3; Gaps 1;

QY 1049 CAGGGAAGAAGTACCTTTTCATGTGGGCGACTTCTGCTGGCGCTCATGGGTTTCGC 1108
Db 1347 CACGACGCGGAGAAGATCTTCCATCTGCACGATGCTCATAGGCGCTCATGACGCG 1406
QY 1109 CACCATCATGGTAGCATGAGCTCTGTCTATCTACACATGACATGACATGCGGCTT 1168
Db 1407 TGTGTGTGTGGGAACGTCAGCAGCATCATCCAGCGCATGCTCGGCCGCTGCTCTA 1466
QY 1159 CTACCCAGATCATGCACTGTGTAAGAAGTACATGAAGTGCAGCAGCTCAACCGAAGCT 1228
Db 1467 CCACAGCGCATGAAGGACCTCAAGACTTTCATCGTGTGCACCGCTGCGCGCGCGT 1526
QY 1229 GGAGCGGAGTATTGTGCTGGTATCAGCACTGCAGATCAACAGAGATGACCAACGA 1288

Db 1527 CAAGCAGCGCATGCTCGAATACTTCCAGACCACGTTGGCCGCTCAACAGCGCATCGAGC 1586
QY 1289 GGTAGCCATCTTACAGCACTTGCCTGAGCGCTGGGGCAGAGTGGCTGTCTGTGCA 1348
Db 1587 CAACGAGTTACTGCGTGACTTCCAGACGAGCTGAGAGCTGACATTTGCTATGCACTGAA 1646
QY 1349 CCTGTCCACTCTGAGCCGGGTGCAGATCTTTACAGAACTGTGAGGCCAGCCTGCTGGAGGA 1408
Db 1647 TCGGGAGATCCTGCAGCTGCCGTTGTTTCGGGGCAGCGAGCAGGGGCTGCCTGCCGGCC-- 1704
QY 1409 GCTGGTGTGAAGTGCAGCCCCAGACCTACTCACCAGGTGAATATGTATGCCGCAAGG 1468
Db 1705 -CTATCGCTGCACATCAAGACCTCGTTCTGGCTCCGGCCGAGTACCTGTGGCCCGTGG 1763
QY 1469 AGACATTGGCCCAAGAGATGTATCATCATCCGAGAGGTCAACTGGCCGTTGGGAGA 1525
Db 1764 GGATGCCCTGCGGACATTACTATGTCTCGGCTCGCTTGAGGTGCTCCGAGA 1820

Search completed: September 10, 2004, 20:28:53
Job time : 169.122 secs

Hand

Sheet

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: September 10, 2004, 18:43:39 ; Search time 122.878 Seconds
(without alignments)
7804.118 Million cell updates/sec

Title: US-09-927-267-3

Perfect score: 1728

Sequence: 1 atagaccagacacaaagt.....gacccacaggtccagagtga 1728

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA:*

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2: /cgn2_6/ptodata/2/ina/5B COMB.seq.*

3: /cgn2_6/ptodata/2/ina/6A COMB.seq.*

4: /cgn2_6/ptodata/2/ina/6B COMB.seq.*

5: /cgn2_6/ptodata/2/ina/6CTUS COMB.seq.*

6: /cgn2_6/ptodata/2/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	78.4	4.5	1307	4	US-09-172-422-3
2	70.2	4.1	1507	4	US-08-997-685A-5
3	65.8	3.8	1790	4	US-08-997-685A-11
4	59.8	3.5	3480	3	US-09-226-012-1
5	59.8	3.5	3950	3	US-09-226-012-3
6	56	3.2	1584	4	US-08-997-685A-3
7	53.6	3.1	3249	4	US-09-358-383C-3
8	53.6	3.1	3355	4	US-09-358-383C-1
9	52.8	3.1	7218	1	US-08-232-463-14
10	52.4	3.0	7218	1	US-08-232-463-14
11	52	3.0	3249	4	US-09-343-494-2
12	52	3.0	3323	4	US-09-600-776-1
13	50.8	2.9	3041	4	US-09-694-777A-19
14	50.4	2.9	3857	4	US-09-336-643A-19
15	49.8	2.9	3064	4	US-09-600-776-5
16	49	2.8	3141	2	US-08-956-242-1
17	49	2.8	3141	3	US-09-331-215-1
18	45	2.6	505	4	US-09-621-976-15639
19	44	2.5	4722	4	US-08-979-608A-14
20	44	2.5	4722	4	US-09-517-849-14
21	44	2.5	4722	4	US-09-616-289-14
22	42.8	2.5	2886	4	US-09-694-777A-13
23	42.8	2.5	2967	4	US-09-694-777A-14
24	42.8	2.5	3002	4	US-09-694-777A-1
25	42.8	2.5	3083	4	US-09-694-777A-2
26	41.8	2.4	364	4	US-09-621-976-17202
27	41.8	2.4	809	2	US-08-370-909-1

28 41.8 2.4 809 3 US-09-056-105-22 Sequence 22, Appli

29 41.2 2.4 3041 4 US-09-694-777A-20 Sequence 20, Appli

30 41 2.4 1995 1 US-08-425-069-3 Sequence 3, Appli

31 41 2.4 1995 2 US-08-317-844B-3 Sequence 3, Appli

32 40.4 2.3 1926 4 US-09-249-585A-2 Sequence 2, Appli

33 40.4 2.3 1926 4 US-09-410-399-3 Sequence 3, Appli

34 40.4 2.3 2580 3 US-09-050-863-2 Sequence 2, Appli

35 40.4 2.3 2580 4 US-09-359-081-2 Sequence 2, Appli

36 40.4 2.3 5452 2 US-09-130-114-1 Sequence 1, Appli

37 40.4 2.3 8705 4 US-09-647-344A-14 Sequence 14, Appli

38 40.4 2.3 9600 3 US-08-910-647-1 Sequence 1, Appli

39 40.4 2.3 9600 4 US-09-620-925-1 Sequence 1, Appli

40 40.4 2.3 10596 1 US-07-884-811-15 Sequence 15, Appli

41 40.4 2.3 10596 1 US-07-885-971-15 Sequence 15, Appli

42 40.4 2.3 10596 1 US-08-087-783A-15 Sequence 15, Appli

43 40.4 2.3 10596 1 US-08-194-088B-15 Sequence 15, Appli

44 40.4 2.3 10596 2 US-08-194-087-15 Sequence 15, Appli

45 40.4 2.3 10596 5 PCT-US93-04648-15 Sequence 15, Appli

ALIGNMENTS

RESULT 1

US-09-172-422-3

; Sequence 3, Application US/09172422A

; Patent No. 6300485

; GENERAL INFORMATION:

; APPLICANT: Adams, Arwen E.

; APPLICANT: Chiu, Choi Ying

; APPLICANT: Duhl, David

; APPLICANT: Gorman, Susan W.

; APPLICANT: Leng, Song

; APPLICANT: Sheffield, Val

; APPLICANT: Welch, Juliet

; TITLE OF INVENTION: MYOSIN IXA AND CYCLIC NUCLEOTIDE GATED CHANNEL-15 (CNCG-15) POLYNUCLEOTIDES, POLYPEPTIDES, AND USES THEREOF

; TITLE OF INVENTION: COMPOSITIONS, METHODS, AND USES THEREOF

; FILE REFERENCE: 200130.442

; CURRENT APPLICATION NUMBER: US/09/172,422A

; CURRENT FILING DATE: 1998-10-14

; NUMBER OF SEQ ID NOS: 3

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 3

; LENGTH: 1307

; TYPE: DNA

; ORGANISM: Homo sapien

; FEATURE:

; NAME/KEY: misc feature

; LOCATION: (1)..(1307)

; OTHER INFORMATION: n = A,T,C or G

US-09-172-422-3

Query Match 4.5%; Score 78.4; DB 4; Length 1307;

Best Local Similarity 46.6%; Pred. No. 7.6e-12;

Matches 324; Conservative 0; Mismatches 366; Indels 6; Gaps 2;

QY 500 TTCGATTCGACAGCTGATGCTTTTACATTTTTCGTCATCCATTTGAAACAGCTGCTAT 559

Db 590 TGGCGATCGTGAACCTCATCGGATGATGCTCTGCTGCTGCTGCTGCTGCTGCTGCTG 649

QY 560 ACTTTGCCCTATCCGGTACCTGGGCTTGGGCGTGAAGCATGGTGTACCCGACCCCG 619

Db 650 AGTTCTGGTACCATGTCTACAGGACTTCCTGACACTGCTGGGTGTCATCAACAACA 709

QY 620 CGCAGCGCTGGCTTTGAGCGCTCGGCGCGCAGTACCTCTATAGCTTTACTTCTCCACGC 679

Db 710 TGTGTACACTCTCTGGG---GAACAGTACTCTTACGGCTCTTCAAGGCTATGAGCC 766

QY 680 TGATATGACTACAGTGGGCGATACACCGCGCCAGCGGGAAGAGTACTCTTTCA 739

Db 767 ACATGTGTGTCATCGGCTACGGCGCGGCGCGCGCGCGCGCATCTCCGACGTCTGGGTCA 826

Qy	906	AGTTATTGACTGGTATCAGCAGCTGCAGATCAACAAGAGATGACCAACGAGGTAGCCAT	965
Db	2154	CCTCGAGGAGTACTTCAGCAGCGCTGCTCTACACCAACGGCATCGACATGAAACGGCGGT	2213
Qy	966	CTTACAGCACTTGCCTCAGCGGCTGCGGCGAGAAGTGGCTGTGTCTGTGCACCTGTCCAC	1025
Db	2214	GCTGAAGGGCTTCCCTGAGTGCCTGCAGGCTGACATCTGCCTGCACCTGAACCGCTCACT	2273
Qy	1026	TCTGAGCGGGTGCAGATCTTTTCAGAACTGTGAGGCCAGCGCTGCTGGAGGAGCTGGTGCT	1085
Db	2274	GCTCAGCACTGTCAAAACCTTCCAGAGGGGCCACCAAGGGCTGCCTTCGGGGCCTTGGCCAT	2333
Qy	1086	GAGCTGCAGCCCGCAGACCTTACTCACCAGGTGAATATGTCGCGCAAAAGAGACATGG	1145
Db	2334	GAGGTTCAAGACCAACACATGACCCGCGCAGGGGACACATGGTGCATGCTGGGGACCTGCT	2393
Qy	1146	CCAGAGATGTACATCATCCGAGAGGG	1172
Db	2394	CACGGCCTGTACTTCATCTCCGGGG	2420

RESULT 6

RESULT 6
US-08-997-685A-3
; Sequence 3, Application US/08997685A

; FACILE NO. 6351821
: GENERAL INFORMATION:

PATENT NO. 05310211
 GENERAL INFORMATION:
 APPLICANT: The Trustees of Columbia University
 APPLICANT: Kandel, Eric
 TITLE OF INVENTION: Brain Cyclic Nucleotide Gated
 FILE REFERENCE: 0575/54806
 CURRENT APPLICATION NUMBER: US/08/997,685A
 CURRENT FILING DATE: 1997-12-12
 NUMBER OF SEQ ID NOS: 60
 SOFTWARE: PatentIn version 3.1

; SEQ ID NO 3

; LENGTH: 1584

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; TYPE: DNA
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; ORGANISM: mouse;

US-08-997-685A-3

Query Match 3.2%; Score 56; DB 4; Length 1584;
Best Local Similarity 44.5%; Pred. No. 1.3e-05;
Matches 310; Conservative 0; Mismatches 380 Indels

500	QY	TTCCGATGCCAAGCTGATGCTTTACATTTTGTGTCATCATTCATTCGGAACGACTGCCTAT	559
566	Db	TGCGCATCTGTAACCTGATCAGCATGATGCTACTGCTCTGCCACTGGGACGGTTGGCTCG	625
560	QY	ACTTTGCCCTATCCCGTACCTGGGCTTCGGGCGTGAAGCATGGGTGTACCCGGACCCCG	619
626	Db	AGTTCTCTGGTCCCATGCTGCAAGACTTCCCAGGAGCTGCTGGGTGTCCATCAACAACA	685
620	QY	CGCAGCTTGGCTTTGAGCGCTTCGGCGCCAGTAGCTCTATAGCTTTTACTTCTCCACGC	679
686	Db	TGGTGAACCACTCTGGTAGGC--GAGCTCTACTCGTTCGCGCTCTTCAGGCCATGAGCC	742
680	QY	TGATACTACTACAGTGGGCGATACCGCGCGCAGCCAGGAGAGAGTAGTACTCTTCA	739
743	Db	ACATGCTGTGCATCGGCTACGGGCGGCGAGCGGCCCGAGAGCATGACAGACATCTGGCTGA	802
740	QY	TGGTGGGGGACTTCTGCTGGCGCTCATGGGTTCGCCACCATCATGGGTAGCATGAGCT	799
803	Db	CCATGCTCAGCATGATCGTAGGGCGCACTGTATGCCATGTTTCATTTGGGACGCCACTG	862
800	QY	CTGTCACTACAACATGAACACTGCAGATGGCGCTTTCTPACCGAGCATATGCACTGGTA	859
863	Db	CGCTCATCCAGTCCCTGGATTGTCACGCGGCCAATACCGAGGAGAAGTACAAGCAAGTAG	922
860	QY	AGAAGTACATGAAGCTGCAGCAGCTCAACCGCAAGCTGGAGCGGCGAGTTATTGACTGT	919
923	Db	AGCAATACATTCCTTCACAAACTTCGCCGCTGACTTCGCGCAGAGAATCCACGATTACT	982
920	QY	ATCAGCACCTGCAGATCAACAGAAGATGACCAACGAGGTAGCCATCTTTACAGCACTTGC	979

983	ATGAACACCGGTA---CCAAAGGAAGATGCTCATGAGGACAGCATCTCTGGGGA	CTCA	1039
980	CTGAGCGGCTGCGGGCAGAAAGTGGCTGTGTGTGCACCTGTCCACTCTGAGCCGGGTGC		1039
1040	ACGGGCCACTGCGTGAAGGAGATTGTGAATCTCAACTGCCGGAAGCTGGTGGCTTCCATGC		1099
1040	AGATCTTTTCAGAACTGTGAGGCCAGCGCTGCTGGAGGAGCTGGTGCTGAAGCTGCAGCCCC		1099
1100	CGCTGTTTGCCATGCGAGACCCCAATTTCGTACAGCCATGCTGCACAAAGCTCA	ATTG	1159
1100	AGACCTTACTCACAGGTGAATATGTATGCCGAAAGAGACATTTGCCCAAGAGATGTACA		1159
1160	AGGTCTTCCAGCTGGAGATTACATCATCCGAGGGGACCATCGGGAAGAAGATGTACT		1219
1160	TCATCCGAGAGGGTCAACTGGCCGTGGTGCAGATG		1195
1220	TCATTCAGCATGGGTGGTGAAGCGTGTCTACCAAGG		1255

RESULT 7

US-09-358-383C-3
; Sequence 3, Application US/09358383C
; Patent No. 6518398

APPLICANT: Curtis.

GENERAL INFORMATION:
APPLICANT: CURTIS, RORY A.J.
TITLE OF INVENTION: NOVEL POTASSIUM CHANNEL MOLECULES AND USES THEREFOR
FILE REFERENCE: MNI-055CP
CURRENT APPLICATION NUMBER: US/09/358,383C
CURRENT FILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: USSN 09/119,855
PRIOR FILING DATE: 1998-07-21
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 3

; LENGTH: 324

TYPE: DNA

; ORGANISM: Macaca sp.

; FEATURE:

; NAME/KEY: CDS

LOCATION: (1)

Query Match 3.1%; Score 53.6; DB 4; Length 3249;
Best Local Similarity 45.6%; Pred. No. 8.7e-05;
Matches 268; Conservative 0; Mismatches 314; Indels 6

Qy	611	CGGACCCGCGCAGCCTGGCTTTTGAGCGCTCGGGGGCCAGTACCTCTATAGCTTTTACT	670
Db	1313	CGGGCTGAGACTGCTAGGGCGCCGTGCTGCGAGCGCTACATCACCCTCCTCTACT	1372
Qy	671	TCTCCACGCTGATCTACTACAGTGG---CGATACACGCCCGCAGCGAGGAGAAG	727
Db	1373	TGCGACTCAGCAGCCTCACCAGCTGGGCTTCGGCAACGTGTCGGCCAAACACGAGCACATG	1432
Qy	728	AGTACTCTTTCATGGTGGGGGCACTTCCTGCTGGCCGCTCATGGGTTTTCGCCACCATCATGG	787
Db	1433	AGAAGATCTTCTCCATCTGCACCATGTCTATCGCGCGCCTGATCGACGGCGTGGTGTTCG	1492
Qy	788	GTAGCATGACTCTGTTCATCTACAAATGACACTGCAGATGGGGCTTCTTACCCAGATC	847
Db	1493	GGAACTGTACGGGCATCATCACGCGATGTACGCCCGCCGCTTCTGTACCAACAGCCGCA	1552
Qy	848	ATGCACCTGTTGAAGAATCATCAATCAGCTGACGACAGTCAACCGCAAGCTGGAGCGCGGAG	907
Db	1553	CGCGCGACCTGGCGGACTCATCCGATCACCCTATCCCAAGCCCTCTAAGACGGCA	1612
Qy	908	TTATTGACTGGTATCAGCACCTGCAGATCAAAGAAGATGACCAACGAGGTAGCCATCT	967
Db	1613	TGCTGAGTACTTCCAGGCCACCTGGCGGTGAACATGGCATCGACCCACCGAGCTGC	1672
Qy	968	TACAGCACTTGCCTGACGGCTCGGGCGAGAAGTGGCTGTCTGTGTGCACCTGTCCACTC	1027

Db 1673 TGACAGAGCCTCCTGACAGCTGCGCGCAGACATCGCCATGCACTGCAACAGAGGTCC 1732
QY 1028 TGACCCGGGTGACATCTTTGAGAACTGTGAGCCAGCCTCTGAGAGAGTGTGTGTA 1087
Db 1733 TG---CAGCTCCCGCTGTTGAGGAGCAGCCGCGGCTGCTCGGGCACTGTCTCTGG 1789
QY 1088 AGCTGACGCCCCAGACCTTACTCACCAGGTGAATATGTATGCGGCAAAAGGAGACATTTGCC 1147
Db 1790 CCCTGCGCGCCGCTTCTGACGCGCGGCGAGTACCTCATCCACCAAGGCGATGCCCTGC 1849
QY 1148 AAGAGATGTACATCATCGAGAGGTCAACTGTGCGCGTGTGGCAGATG 1195
Db 1850 AGGCCCTCTACTTTGTCTGCTCTGCTCCATGAGGTGCTCAAGGGTG 1897

RESULT 8

US-09-358-383C-1
; Sequence 1, Application US/09358383C
; Patent No. 6518398
; GENERAL INFORMATION:
; APPLICANT: Curtis, Rory A. J.
; TITLE OF INVENTION: NOVEL POTASSIUM CHANNEL MOLECULES AND USES THEREFOR
; FILE REFERENCE: MNI-055CP
; CURRENT APPLICATION NUMBER: US/09/358.383C
; CURRENT FILING DATE: 1999-07-21
; PRIOR APPLICATION NUMBER: USN 09/119,855
; PRIOR FILING DATE: 1998-07-21
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 3355
; TYPE: DNA
; ORGANISM: Macaca sp.
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (104)..(3352)
US-09-358-383C-1

Query Match 3.1%; Score 53.6; DB 4; Length 3355;

Best Local Similarity 45.6%; Pred. No. 8.8e-05;
Matches 268; Conservative 0; Mismatches 314; Indels 6; Gaps 2;

QY 611 CGGACCCCGCGCAGCCTGCTTTGAGCGCCTTGGCGGCCAGTACTCTATAGCTTTTACT 670
Db 1416 CGGGCTGAGAGCTGAGCGGCCGCTGCTGCGCAGCGCTATACCTCCCTCTACT 1475
QY 671 TCTCCAGCTGATACTGACTACATGGG---CGATACCGCCGCCAGCCAGGGAAG 727
Db 1476 TCGCACTCAGCAGCCTCACCAGCGTGGGCTTCGGCAACGTTCGGCCAAACACGACACTG 1535
QY 728 AGTACCTCTTCATGGTGGGAGCTTCTGCTGGCGGTCATGGGTTTCGCCACCATCATGG 787
Db 1536 AGAAGATCTTCTCCATCTGACCATGCTCATCGCGCCCTGATGACGCGGTGTGTTCG 1595
QY 788 GTAGCATGAGTCTGTCTATCTACAACTGAACACTGCGAGATGCGGCTTTCTACCCAGATC 847
Db 1596 GGAACGTGACGCCCATCATCAGCGCATGTACGCCCGCGCTTCTGTACACAGCCGCA 1655
QY 848 ATGCACTGGTGAAGAAGTACATGAACTGACAGCTCAACCGCAAGCTGAGAGCGCGAG 907
Db 1656 CGCGCAGCTGCGGAGTACATCCGCTATCCACCGTATCCCAAGCCCTCAAGCAGCGCA 1715
QY 908 TTATTGACTGTATCAGCACTGAGATCAACAGAGATGACCAACGAGTAGCCATCT 967
Db 1716 TGCTGGAGTACTTCAGGCCACCTTGGCGGTGAAATGCGATCGACACCAACCGAGCTGC 1775
QY 968 TACAGCACTTGCCTGAGCGGCTGCGGCGAGAGTGTGTCTGTGCACTGTCCACTC 1027
Db 1776 TGCAGACCTCCCTGACGAGCTGCGCGAGACATCGCCATGACCTGCACAGAGAGTCC 1835
QY 1028 TGACCCGGGTGACATCTTTGAGAACTGTGAGGCCAGCCTGCTGGAGAGCTGTGTGTA 1087
Db 1836 TG---CAGCTGCCGCTGTTTGGAGCAGCAGCCGCGGCTGCTGCGGCGACTGTCTCTGG 1892

QY 1088 AGCTGACGCCCCAGACCTTACTCACCAGGTGAATATGTATGCGCAAGGAGACATTTGCC 1147
Db 1893 CCCTGCGCGCGCCTTCTGACGCGCGGCGAGTACCTCATCCACCAAGGCGATGCCCTGC 1952
QY 1148 AAGAGATGTACATCATCGAGAGGTCAACTGTGCGCGTGTGGCAGATG 1195
Db 1953 AGGCCCTCTACTTTGTCTGCTCTGCTCCATGAGGTGCTCAAGGGTG 2000

RESULT 9

US-08-232-463-14/c
; Sequence 14, Application US/08232463
; Patent No. 5670367
; GENERAL INFORMATION:
; APPLICANT: DORNER, F.
; APPLICANT: SCHEIFLINGER, F.
; APPLICANT: FALKNER, F. G.
; TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
; NUMBER OF SEQUENCES: 52
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 1800 Diagonal Road, Suite 500
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22313-0299
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/232,463
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/07/935,313
; FILING DATE:
; APPLICATION NUMBER: EP 91 114 300.6
; FILING DATE: 26-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: BENT, Stephen A.
; REGISTRATION NUMBER: 29,768
; REFERENCE/DOCKET NUMBER: 30472/114 IMMU
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703)836-9300
; TELEFAX: (703)683-4109
; TELEX: 899149
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 7218 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; CLONE: ptz9pt-Fis
US-08-232-463-14

Query Match 3.1%; Score 52.8; DB 1; Length 7218;
Best Local Similarity 2.4%; Pred. No. 0.00021;

Matches 9; Conservative 223; Mismatches 150; Indels 0; Gaps 0;

QY 1340 AGGAGACCTCGCGGAGGTGCTGAGCGAGTATCCCAAGCACACCATCATCGAGGAGA 1399
Db 1436 ACRRR 1377
QY 1400 AAGACGTGAGATCTGCTGAAATGAACAAGTTGACGTGAATGCTGAGGCGACTGAGA 1459
Db 1376 RRR 1317
QY 1460 TCGCCCTGACGAGGCGCACAGAGTCCCGGCTACGAGCGCTAGACCAGCAGCTGATGATC 1519

Db 1493 GGAACGTGACGGCCATCATCCAGCGCATGTAGCCCGCGCTTTCTGTACACACGCCGA 1552
QY 848 ATGCACTGGTGAAGAGTACATGAAGCTTGACGACGTCACCGCAAGCTGGAGCGCGAG 907
Db 1553 CGCGGACCTGGGAGCTACATCCGATCCACCGTATCCCAAGCCCTCAAGCAGCGCA 1612
QY 908 TTATTGACTGGTATCAGCACCTGCAGATCAACAAGAGATGACCAACGAGGTAGCCATCT 967
Db 1613 TGCTGGAGTACTTCAGGCGCACTGGCGGGTGAACAATGGCATCGACACCGAGCTGC 1672
QY 968 TACAGCACTTCCTGAGCGGCTGGCGGAGAGTGGCTGTGTCTGTGCACTGTCCACTC 1027
Db 1673 TGCAGAGCTCCCTGACGAGCTGGCGCAGACATCGCATGCACTGCAACAAGGAGTCC 1732
QY 1028 TGAGCGGGTGCAGATCTTTAGAACTGTGAGGCGAGCTGTGAGGAGCTGTGTGTGA 1087
Db 1733 TG--CAGCTGCCACTGTTGAGGCGGCGAGCGCGGCTGTCTGGGCACTGTCTCTGG 1789
QY 1088 AGCTGCAGCCCCAGACCTACTCACCAGGTGAATATGTATCGGCAAGAGACATTTGCC 1147
Db 1790 CCCTGGGCGCGCTTCTGACGCGCGGCGAGTACCTCATCCACAAGCGATGCCCTGC 1849
QY 1148 AAGAGATGTACATCATCGAGGCTCAACTGGCGTGGTGGCAGATG 1195
Db 1850 AGGCCCTCTACTTTGTCTGCTCTGGCTCCATGGAGGTGCTCAAGGGTG 1897

RESULT 12

US-09-600-776-1
; Sequence 1, Application US/09600776
; Patent No. 6326168
; GENERAL INFORMATION:
; APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.
; TITLE OF INVENTION: A novel potassium channel protein
; FILE REFERENCE: Y9903-PCT
; CURRENT APPLICATION NUMBER: US/09/600,776
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: JP P1998-011434
; PRIOR FILING DATE: 1998-01-23
; PRIOR APPLICATION NUMBER: JP P1998-346198
; PRIOR FILING DATE: 1998-12-04
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 3323
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (6)...(3257)
US-09-600-776-1

Query Match 3.0%; Score 52; DB 4; Length 3323;
Best Local Similarity 45.4%; Pred. No. 0.00024;
Matches 267; Conservative 0; Mismatches 315; Indels 6; Gaps 2;

QY 611 CGGACCCGCGCAGCTGGCTTTGAGCGCTGGCGGCGAGTACTCTATAGCTTTTACT 670
Db 1318 CGGGCTGGAGCTGCTGGGCGCGCTGCTGGCGAGCGCTACATCACTCCCTCTACT 1377
QY 671 TCTCCAGCTGATATGACTACAGTGGG--CGATACACGCGCGCCAGCGAGGAAG 727
Db 1378 TCGCACTCAGAGCTCACCAGCTGGCTTCGCAAGGTGTCGCGCAACAGGACACCG 1437
QY 728 AGTACCTTTTCANGSTGGGAGCTTCCTGTGGCGCTCATGGTTTGGCCACCATATGG 787
Db 1438 AGAAGATCTTCTCCATCTGCACTGCTCATCGGCGCCCTGATGACGCGGTGGTGTG 1497
QY 788 GTACATGAGCTCTGTCTATACAACTGAACATGTGAGATGCGGCTTTTCTACCCAGTC 847
Db 1498 GGAACGTGAGCGGCATCATCCAGCGCATGTAGCGCGCGCGCTTTCTGTACACAGCGCA 1557

QY 848 ATGCACTGGTGAAGAGTACATGAAGCTTGACGACGTCACCGCAAGCTGGAGCGCGAG 907
Db 1558 CGCGGACCTGGGAGCTACATCCGATCCACCGTATCCCAAGCCCTCAAGCAGCGCA 1617
QY 908 TTATTGACTGGTATCAGCACCTGCAGATCAACAAGAGATGACCAACGAGGTAGCCATCT 967
Db 1618 TGCTGGAGTACTTCAGGCGCACTGGCGGGTGAACAATGGCATCGACACCGAGCTGC 1677
QY 968 TACAGCACTTCCTGAGCGGCTGGCGGAGAGTGGCTGTGTGTGTGCACTGTCCACTC 1027
Db 1678 TGCAGAGCTCCCTGACGAGCTGGCGCAGACATCGCATGCACTGCAACAAGGAGTCC 1737
QY 1028 TGAGCGGGTGCAGATCTTTAGAACTGTGAGGCGAGCTGTGAGGAGCTGTGTGTGA 1087
Db 1738 TG--CAGCTGCCACTGTTGAGGCGGCGAGCGCGGCTGTCTGGGCACTGTCTCTGG 1794
QY 1088 AGCTGCAGCCCCAGACCTACTCACCAGGTGAATATGTATCGGCAAGAGACATTTGCC 1147
Db 1795 CCCTGGGCGCGCTTCTGACGCGCGGCGAGTACCTCATCCACAAGCGATGCCCTGC 1854
QY 1148 AAGAGATGTACATCATCGAGGCTCAACTGGCGTGGTGGCAGATG 1195
Db 1855 AGGCCCTCTACTTTGTCTGCTCTGGCTCCATGGAGGTGCTCAAGGGTG 1902

RESULT 13

US-09-694-777A-19
; Sequence 19, Application US/09694777A
; Patent No. 6638736
; GENERAL INFORMATION:
; APPLICANT: PARDO-FERNANDEZ, LUIS ANGEL
; APPLICANT: STUEHMER, WALTER
; APPLICANT: BECKH, SYNNOVE
; APPLICANT: BRUGEMANN, ANDREA
; APPLICANT: FERNANDEZ-MIRANDA, DONATO DEL CAMINO
; APPLICANT: PEREZ, ARACELI SANCHEZ
; APPLICANT: WESELOH, RUDIGER
; TITLE OF INVENTION: NOVEL HUMAN K+ ION CHANNEL AND THERAPEUTIC APPLICATIONS
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: MFG-8
; CURRENT APPLICATION NUMBER: US/09/694,777A
; CURRENT FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: PCT/EP99/02695
; PRIOR FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: EP 98 10 7268.9
; PRIOR FILING DATE: 1998-04-21
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 19
; LENGTH: 3041
; TYPE: DNA
; ORGANISM: Bovine sp.
US-09-694-777A-19

Query Match 2.9%; Score 50.8; DB 4; Length 3041;
Best Local Similarity 44.5%; Pred. No. 0.0005;
Matches 245; Conservative 0; Mismatches 302; Indels 3; Gaps 1;

QY 652 TACCTCTATAGCTTTTACTTCTCCACGCTGATCTACTACTAGTGGGCG--GATACACCG 708
Db 1305 TACATCTCTCTGTTGTTATTTTCCATGACACGCTCACCAGGTGGGCTTTGGAAATC 1364
QY 709 CGGCACCGAGGAAGAAGTACCTTTTATGGTGGGCGACTTCTGTGGCGGCTCATG 769
Db 1365 GCCCGCTCCACAGACATTGAGAAGATCTTTGGCGTGGCCATCATGATGATTGGCTCCTC 1424
QY 769 GGTTTGGCCACCATCATGGGTAGCATGAGCTCTGTCTATCTACACATGACACTGACAT 828
Db 1425 CTCTATGCCACCATCTTTTGGGAATGTGACACCATTTTCCACAGATGTACGCCAACCC 1484
QY 829 CGCGCTTTCTACCCAGATCATGCACTGGTGAAGAAGTACATGAAGCTGACGAGCTCAAC 888
Db 1485 AACAGGTACCATGAGATGCTCAACAGTGTCCGGGACTTCTTGAAGCTTCTACAGGTGCC 1544

Db 1527 CAAGCAGCGCATGCTCGAATACTTCCAGACCACGCTGGGCCGTCAACAGGGCATCGACGC 1586
QY 957 GGTAGCCATCTTACAGCACTTGCCTGAGCGGCTGCGGGCAGAGTGGCTGTGTCTGTGCA 1016
Db 1587 CAACGAGTTACTGCGTGACTTCCAGACGAGCTGAGAGCTGACATTGCTATGCACCTGAA 1646
QY 1017 CCTGTCCACTCTGAGCCGGGTGCAGATCTTTTCAGAACTGTGAGGCCAGCCTGCTGGAGGA 1076
Db 1647 TCGGAGATCCTGCAGCTGCCGTTGTTTCGGGGCAGCGAGCGGGGCTGCCTGCGGGCC-- 1704
QY 1077 GCTGGTCTGAAGCTGCAGCCCCCAGACCTACTACAGGTGAATATGTATGTCGCCGAAAGG 1136
Db 1705 -CTATCGCTGCACATCAAGACCTCGTTCTTGCGCTCCGGCGAGTACCTGTTGGCCCGTGG 1763
QY 1137 AGACATTGGCCAGAGATGTACATCATCCGAGAGGTCNACTGCCCGTGGTGGCAGA 1193
Db 1764 GGATGCCCTGCAGGCACATTACTATGTCTGCTCCGGCTCGCTTGAGGTGCTCCGAGA 1820

Search completed: September 10, 2004, 20:28:58
Job time : 127.878 secs

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